



THE CULTIVATOR.

FORBES. VAN VANKEN. N. Y.

THIRD

To Improve the Soil and the Mind.

SERIES.

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Arrangements, Hopes and Aims.

The Senior Editor and sole Proprietor of *THE CULTIVATOR* and *COUNTRY GENTLEMAN*, has associated with himself in the Editorial Management of his Journals, and in his business as Publisher, LUTHER H. TUCKER, whose experience in both these departments, for more than a year past, will, it is believed, enable the new firm, LUTHER TUCKER AND SON, to give increased energy, interest and value to their several Publications.

The aim of this paper, since its commencement, has not been merely to *compare well* with its contemporaries, but to take advantage of every practicable means to attain that position, in the view of its conductor best qualified to meet the wants of the American Farmer. In reviewing his course, he flatters himself that this end has been sought with at least some measure of success. Taking the foremost rank at the outset, the influence of *THE CULTIVATOR* has been ever since rapidly extending; and it has numbered among its contributors the most distinguished and intelligent agriculturists of our whole country. From the first it has been the depository of a mass of facts in relation to Agriculture not to be found, it is believed, in any other series of volumes; and the favor with which it has been received, and the ample support accorded to it, are, undoubtedly, largely attributable to the practical nature and value of its contents.

In the same aim we purpose to continue it, with the renewed assurance of permanence conveyed in the present arrangements, and the renewed enterprise and determination to excel, conferred by them. It is with the hope of awakening farmers at large to their need of enlightenment; of assisting them in the field and encouraging them at the fireside; of lifting from their shoulders, perhaps, somewhat of the burdens of their life; of creating with them a taste for the knowledge, the comforts, the beauties at their command; of developing among them an appreciation of these and

other resources, and a true spirit of advancement, that we shall labor.


— Reader, you have here our whole platform. Will you not assist us in the work?

Such is the *cheapness* merely, of the terms on which we offer *THE CULTIVATOR* and *REGISTER* to the public, that it would seem as if they *can but* reach that extent of circulation, with the aid of which they can alone be sustained.

If our Agents and Friends will *enlist the co-operation of other subscribers*, the number obtained might be very much increased over that of any previous year. We shall esteem it a favor if they will do this; and should any be unable to head the movement, attend to remittances, &c., themselves, if they would *place the matter in the hands of some competent person* who would feel interested in attending to it.

We shall hope for a circulation in 1856, of Fifty Thousand copies. That there is nothing chimerical in this hope, all will agree who consider for a moment the vast numbers of our farming population, the value and beauty of the paper furnished, and the smallness of the cost exacted.

With this hope we shall labor; to its accomplishment we ask the labors of all who are interested with us in the cause of the Farmer, and in the progress of a real and noble enlightenment, of larger views and higher aims, in that class which constitutes the very foundation of our national structure, and the only security of its well-being.

 The particular attention of our friends is requested to the Prospectuses of both *THE CULTIVATOR* and *COUNTRY GENTLEMAN*, forwarded with their last numbers. We have, as promised in the November issue, endeavored to send to those on whom we chiefly depend for sustaining and increasing our circulation, a copy of the *ANNUAL REGISTER*, for use in canvassing. Some, even of our best Agents, may perchance be accidentally omitted; we trust any of these, or any friend disposed to aid in the cause of American Agriculture and Rural Improvement, will write us for a

copy and for specimen numbers, and go to work with them as earnestly as their deserts and his own circumstances will admit. It will be seen that we renew, with the two very important additions mentioned, our last year's offer of

PREMIUMS TO AGENTS.

As an inducement to Agents to exert themselves to form Clubs, aside from the consciousness of the benefit they will confer upon their neighbors by placing such a journal in their hands, we offer the following list of Premiums to those who send us the largest amount of cash subscriptions to our journals for the year 1856, previous to the 10th of April next:

1. For the largest amount, FIFTY DOLLARS.
2. For the next largest, FORTY-FIVE DOLLARS.
3. For the next largest, FORTY DOLLARS.
4. For the next largest, THIRTY-FIVE DOLLARS.
5. For the next largest, THIRTY DOLLARS.
6. For the next largest, TWENTY-FIVE DOLLARS.
7. For the next largest, TWENTY DOLLARS.
8. For the next largest, FIFTEEN DOLLARS.
9. For the next largest, TEN DOLLARS.
10. For the next largest, FIVE DOLLARS.
11. For the TEN next largest Amounts, Each a Bound Set of the Six Quarto Volumes of the Cultivator, from 1838—1843 inclusive.
12. For the TEN next largest Amounts, Each a Volume of the Transactions N. Y. State Ag. Society for 1854.

Agents who compete for the above prizes must, in all cases, remit with their orders, at the rate of Fifty Cents for each copy of THE CULTIVATOR, and One Dollar and Fifty Cents—the lowest club price, where ten or more copies are taken—for each subscriber to the COUNTRY GENTLEMAN.

We ask attention also to the addition of no less than TWENTY PRIZES to the List as offered last year. These will cover a large number of cases in which nearly equal labor is expended, and which last year received no "material" acknowledgment of their exertions.

One suggestion we ought to make. That all the labor of securing clubs ought not to be left with one Agent—but that every one should endeavor to co-operate with him in obtaining and increasing the subscriptions which he bears the trouble and expense of forwarding to us. This will assist both him and us, and will enable ALL to work together in the common cause.

TERMS OF THE CULTIVATOR.

FOR A SINGLE COPY, FIFTY CENTS.
FOR TWENTY COPIES, with REGISTER } \$10.00
for 1856 to each, }

TERMS OF THE COUNTRY GENTLEMAN.

One copy, one year, \$2.00
Three copies, " 5.00
Five copies, " 8.00
Ten copies, " 15.00

OR FOR SIX MONTHS:

One copy, \$1.00
Six copies, 5.00
Ten copies, 8.00

Subscribers in British Provinces.

We have to pay the United States postage on all papers to the British Provinces; and this we cheerfully do, to all subscribers who pay the single copy price of \$2.00 for the Country Gentleman, and Fifty Cents for The Cultivator; but on all

clubs, the U. S. postage must be added. Hence our club terms to them for the latter will be—

20 copies and the REGISTER to each, 11.60
And for the COUNTRY GENTLEMAN,
3 copies, \$5.75
10 copies, 17.50

Dating Letters.

It is of the greatest importance, that every person writing us should give his full Post Office address—naming Post Office, County and State—for instance, as follows:

Shuttsville, Jefferson Co., Ky., Oct. 1, 1855.

If all our correspondents would thus commence their letters, and be careful to write their names plainly, it would save us much labor and vexation, and secure a prompt and correct fulfilment of their requests.

Great care should be taken to write the name and address of each subscriber distinctly, thus:

"John Smith, Lenox, Berkshire Co., Mass."

Postage on Our Publications.

On the Cultivator, per year, 6 cents.
Country Gentleman, per year, 26 cents.
except in Albany county, where it is free.
Illustrated Annual Register, if prepaid, 2 cents.
Payable where delivered, 4 cents.

Agents can remit, at two cents per copy for the Register, and have the postage paid here, or let the subscribers pay four cents on delivery, as they prefer. The postage on the papers must be paid quarterly in advance, at the post offices where delivered.

Register for 1855 or 56.

Gentlemen ordering the ANNUAL REGISTER, are particularly requested to specify the one they want, whether for 1855 or 1856.

A Word on Stabling Cattle and other Animals.

The time has come when old Borers begins to whistle through the lifeless trees, and stern winter is hard upon us; and it becomes farmers to make preparation for stabling their animals. Notwithstanding we live in a day of great improvement in farming, yet many farmers are opposed to stabling their stock, and still continue to throw their fodder into the mud, and at the mercy of the winds; and instead of sheltering their swine, they let them run over their whole farm, rooting up their best meadows, and perhaps their neighbors' also. Every observing farmer knows that it is as natural for cattle to seek a dry and warm shelter, as it is for the human family; yet it appears as if some farmers thought their salvation depended on keeping a large stock, half-fed, half-stabled, half-cared for. No farmer, whose heart is not harder than a mill stone, can enter his dwelling on a cold winter's night, by a good fire, and feast on the luxuries of the earth, while his stock are looting and bleating about the lots and streets for the want of proper food and shelter. GEO. CARGILL. Berkshire, N. Y.

SHORTHORNS IN SCOTLAND.—The recent annual sale of Shorthorn bull calves at Shethin, 18 animals sold for 773 guineas, or about \$215 each. "This," says the North British Agriculturist, "is perhaps the highest average at any sale of bull calves in the north since Shorthorns were introduced."

When to Use Barn-Yard Manure.

MESSRS. EDITORS—If you had a farm of 90 acres, and stock upon it to make about 100 loads of manure per annum, would you apply that made from fall to spring, on your corn, potato or other ground? or would you apply it in the fall on your grass or other ground? Your answer will interest one at least of your readers. H. L. D. Moreau Station, N. Y.

In the present state of agricultural science we can give no satisfactory answer to these questions. Indeed, were we better acquainted with the action of fertilizing substances on different crops, it would still be difficult to determine, under the various circumstances of practical agriculture, what particular mode of treating and applying manure would be most advantageous. Had we simply to decide which mode supplied the plants with the greatest amount of manurial elements, we should say, apply the manure in the green or unfermented state, and plow it under as soon as possible, for in this way the manure would decay in the soil, and all the gases evolved be detained. But this, though an important one, is not the only question. The manure in the green state does not act as quickly as when properly fermented in the barn-yard or heap; and much more labor is required to draw it on to the land, spread it and plow it under, than when concentrated by judicious fermentation. We have to decide whether the loss during fermentation is so great as to counterbalance these advantages. As manure is usually managed, there is unquestionably much loss of carbonate of ammonia during fermentation; but this need not be. In a well managed barn-yard or manure heap, the loss of ammonia or of any other valuable substances is much less than many of our agricultural writers appear to suppose. THAYER could not detect the escape of ammonia from his manure heap by the most delicate chemical tests. Dr. WOLFF, an able and reliable German chemist, says: "where yard manure and composts are skilfully prepared, the loss of ammonia is very slight, even without the use of fixing agents." From these facts we should conclude that it was better to reduce or concentrate the manure as much as possible by fermentation, before applying it to the land. But here we are met with a question in regard to the mechanical action of barn-yard manure. Yes, manure unquestionably has a beneficial mechanical action on some soils; when plowed under a stiff clay, it doubtless renders it lighter and more porous, and under such circumstances we may conclude that the longer, greener, and more bulky it is, the greater will be its beneficial effect. Even on very light, sandy soils, we are not sure but that under some circumstances manure may be applied with much advantage on the surface as a mulch; and of course the longer and greener it is the better. We believe the loss from the escape of gaseous matter in the gradual decay of green, strawy manure, spread out on the surface of the soil, is much less than is generally imagined. There is unquestionably some loss, but in many cases, we believe the benefit derived from the mulch would more than counterbalance it.

In deciding when and how to apply manure, we must not forget, what is gained by drawing it out at a comparatively leisure season of the year. In this climate, the period allotted the farmer to prepare and sow his land is so short, and labor so much higher than during the winter months, that this consideration is of particular importance.

In England, manure is usually applied to the turnip

crop in the spring, or to the wheat crop in the autumn. Since the introduction of superphosphate of lime, guanos and other concentrated fertilizers, the latter course is most frequently adopted by intelligent farmers. Still, there as here, it is one of the "vexed questions" of agriculture. The working season in England is much longer than with us, and yet sometime since we received a letter from one of the best practical farmers of Shropshire—a gentleman who on 268 acres of land kept 33 milch cows, some 20 head of young cattle, 8 horses, 250 sheep, and a large number of hogs, besides having each year, 40 acres of wheat, 40 of barley and 40 to 50 of turnips, potatoes, vetches, &c.—asking our opinion if there would be much loss of ammonia, if he should draw out his manure late in the autumn, and spread it on his wheat stubbles, that were to be sown with turnips the next spring. He found it no easy task to draw out the immense quantity of manure made on the farm in season for either the turnip or wheat crop. The answer given can be of no interest to our readers. We allude to the matter simply to show that, even in England, farmers would be willing to submit to a little loss of fertilizing matter, if it would enable them to cart out their manure at a leisure season of the year.

Our correspondent has 90 acres of land, and manure enough say, for 10 acres. When and to what shall he apply it? Shall it be used in the spring, in a comparatively green state; and, if so, to what crops? Not to barley; not to oats; farmers are mostly unanimous on this point. To grass land as a top dressing? No; for, if dry weather ensues, it will do no good. For such a purpose it should be composted with loam, muck, &c., and applied *very early* in the spring, or still better in the autumn. The only crops left are potatoes and other roots, and corn. It is certain that to get a large crop of potatoes we must in some way make the land rich; yet since the potato disease became so prevalent, the practice of applying putrescent manures directly to the potato, has become much less common than formerly. We are not prepared to say that it is an injudicious practice, although there can be little doubt that potatoes so grown are more liable to the disease, and are not so palatable as those grown on poor sandy soil. Carrots, parsnips, beets, mangolds, &c., must have manure, but it ought to be pretty well decomposed. Corn likes manure, and is not particular as to how it is applied. Nevertheless, in a dry season, the benefit received from green manure plowed in, or even from that which is thoroughly decomposed and applied in the hill is not very perceptible.

As we said, English farmers frequently use their manure for wheat. They turn over a clover ley immediately before sowing the wheat, and plow under the manure at the same time. Farmers are here too busy during the wheat seeding to adopt this practice, even were there no other reasons against it. Many of our best wheat growers break up their clover sods in July, and sow the wheat without any more plowing—the land being kept clean, and got into good tilth by the frequent use of the cultivator, harrow, &c. Manure might be plowed under in July, at breaking up; but considerable clover is generally turned under, and it would be difficult to bury both clover and manure so that the cultivator would not afterwards work it up to the surface. Nevertheless, if the farmer is not too busy in the corn or hay field, we are not sure but what, under certain circumstances, such a practice might be advantageous.

Unless the soil is very light, or very hilly, and there is danger of leaching, we should, taking everything into consideration, prefer to apply manure in the fall after the busy season is over, or perhaps in the winter during good sleighing, to such clover fields as are intended to plant with corn or potatoes next spring. This manured land would give an early bite of clover in the spring, or if it was not wanted as food for animals, it might be turned under as food for plants. The land should be plowed as soon after it is plowed as possible, for it is said that the grubs will feed on the clover and not touch

the corn till it has obtained sufficient strength to resist their attack.

To carry out this method of applying manure in the autumn, we of course have to keep the manure made during the winter, through the dry hot summer months, and there is much reason to apprehend considerable loss of fertilizing matter, as barn-yards are usually constructed and manure heaps are too frequently managed. But there need be no loss—or at least very little. In a good yard, where the buildings are all spouted and a commodious tank is provided to hold all the drainings, the manure need not be touched, but should be well covered in the spring with old straw, muck, loam, or other absorbent material; and the mass be occasionally watered from the tank as it becomes dry. The drainings in the tank should be kept well saturated with plaster.

We throw out these hasty hints, in the hope that our correspondents will take up the subject, and discuss it freely through the columns of the COUNTRY GENTLEMAN.

Agricultural Discussion at the State Fair.

Comparative Value of Guano and Barn-yard Manure—Salt, &c.

During the late State Fair at Elmira, some little excitement was caused by SOLON ROBINSON, of the *New-York Tribune*, asserting that on Wednesday evening he would prove that no farmer could afford to draw manure a mile, even could he obtain it for nothing. At the appointed hour the room was filled, and the speaker essayed to fulfil his promise.

On a prairie soil, he said, it would not pay to draw manure any distance, because the soil contains too much humus. He had himself, preferred to move the barn instead of the manure. But he did not refer to these soils. He would instance the poorest soils of Long Island, or the sand hills of Albany, where farmers were in the habit of taking their straw to New-York, selling it for a trifle over the cost of drawing, and taking back a load of colored straw called manure. It was on these poor soils that farmers could not afford to draw manure one mile. But he should be asked, "What will you do with the manure?—throw it away?" Not at all. Apply it to the land near the house, and on the more distant fields, use some concentrated fertilizer, in the fore ranks of which he placed Peruvian guano. He had seen 200 lbs. of Peruvian guano per acre, increase the wheat crop from four to seventeen bushels per acre. Could any such results be obtained from barn-yard manure? Could any farmer afford to draw it a mile when he could get Peruvian guano at its present price? Then there was salt. "Salt is worth more as a manure than it sells for for other purposes. Farmers can make money by going to Syracuse and purchasing salt at market prices and sowing it on their land." One farmer had told him to-day, that he hauled wet leached ashes 16 miles, and he considered the benefit sufficient to pay the expense. He, Mr. R., asked him why he hauled ashes so far. He replied, "for the good they do the land." Mr. R. supposed the benefit was from the potash they contained. Now, could not the potash be obtained in a more concentrated form? Boats are now being loaded at Rochester, with leached ashes for the use of Long Island farmers. The potash they contained could be obtained in the market at a much

cheaper rate. The time is coming when the farmer will know what to put on his land to produce wheat or any other crop, as certainly as the housewife knows what to put into the trough to make bread. It is just as easy for him to know.

SANFORD HOWARD of the *Boston Cultivator*, thought the benefit derived from leached ashes was not from the potash they contained alone. He did not know what gave leached ashes their peculiar value. No matter if we do not, so long as experience proves their value. We know, however, that they contain some phosphates; and it is probable that old leached ashes, that have been exposed to the atmosphere, contain nitrogen, and would be valuable on that account. He had seen guano used without any visible effect. He mentioned several instances where salt had been applied to land without any benefit. One gentleman who manufactured salt, and had tried it on his land repeatedly, informed him that he found the less salt he got on his soil the better.

L. WETHERELL stated that a farmer in Hampshire County, Mass., informed him that "no farmer could afford to move his manure at all, as long as he could obtain guano at present prices." Another farmer told him, that on poor land where he could obtain nothing—not even "poverty grass," by the use of 300 lbs. of guano per acre he succeeded in raising 30 bushels of wheat. Another gentleman had used guano as a top-dressing on grass, and obtained good results, but ever afterwards nothing would grow on the land.

HON. GEO. GEDDES, of Syracuse, had long time ago given up the idea that agriculture is an exact science. He had tried salt to his satisfaction. He had staked out a rod of land in each of three different fields, and carefully dressed them with salt, and sowed them with barley, oats, and wheat; and he never could see the difference between them and where no salt was applied. The President of the Onondaga County Society called on him to visit a field of wheat, where salt had been applied on a portion of it, and where, he said, the exact line of demarkation could be distinctly perceived; but his, (Mr. Geddes'), eyes were not sharp enough to distinguish it.

HUGH T. BROOKS, of Wyoming, thought a good deal of barn-yard manure. When we speak of barn-yard manure, we use an indefinite term. It may mean something of great value, or a comparatively worthless compound. He put a good dressing of manure on his corn fields, and the census man stated that it was the best corn he had seen. He, Mr. B., thought that farmers should husband their manures, and return all animal and vegetable refuse to the earth from whence it came.

SANFORD HOWARD said there was a gentleman present who had had much experience in the use of guano and other concentrated fertilizers, and who had been for some years connected with an extensive series of experiments in England, and he would like to hear his opinion in regard to the subjects under discussion. He referred to JOSEPH HARRIS of the *Country Gentleman*.

Mr. HARRIS agreed with Mr. Robinson that Peruvian guano was the cheapest and best concentrated fertilizer at present in the market, for wheat, corn, and other cereals. Mr. R. had not attempted to prove that "no farmer could afford to draw manure one mile." He had simply endeavored to show that Peruvian guano, salt, &c., were cheaper sources of fertilizing matter than barn-yard manure. The question to be decided, was the relative value of Peruvian guano and barn-yard manure. Chemical analysis afforded much light on the point. Peruvian guano contained all the elements of barn-yard manure. The difference between them is mainly in the relative proportion of these elements. Barn-yard manure contained an immense amount of carbonaceous matter, silica, &c., while Peruvian guano contained very little. But these substances were of little manurial value. The most valuable ingredient in Peruvian guano was

ammonia, and we may take the quantity of this substance as indicating the relative value of the two manures. Certainly this method would not underrate the ultimate value of barn-yard manure. Good Peruvian guano contains twenty-five times as much ammonia or nitrogen as good barn-yard manure. According to this method of estimating their relative manurial value, one ton of Peruvian guano was equal to 25 tons of barn-yard manure. If Peruvian guano sells for \$50 per ton, barn-yard manure is worth \$2 per ton. He would leave farmers to decide whether they could afford to draw it one mile for this.

In reply to various questions asked by several gentlemen present, Mr. H. said he had seen salt used as a manure in many instances, and never once with any marked beneficial effect. Nevertheless there were many well authenticated experiments where it had produced a considerable increase of the crop. It gave strength and brightness to the straw. Prof. Way has suggested that salt acts beneficially on some soils, by increasing the solubility of the double silicate of alumina and ammonia, in which form he thinks it not improbable that the silica so largely existing in the straw of wheat, and which enables it to stand erect, is taken up by the plant. We have no existing system of rotation, by which sodium and chlorine,—the elements of salt,—could be removed from the soil without, at the same time, removing other elements of plants in greater proportion. Salt, therefore, can never be used, to any great extent, as a manure. It can never be a manure equal to phosphoric acid or ammonia, inasmuch as a small quantity only is removed from the soil, as compared with these and other substances. He, Mr. H., was greatly in favor of Peruvian guano, yet its value might be over estimated. In England, 3 cwt. of good Peruvian guano gives an increase in the wheat crop of 10 bushels per acre. At present prices this would cost \$10, and it follows that if wheat sells for \$1 per bushel, little is gained by its use; but if it sells for \$2, the application of guano will be quite profitable. Those who are continually holding up to our imitation the high farming of England, appear to forget that English farmers obtain a higher price for their produce. He believed, that for the production of wheat this climate was superior to that of England, and that if he could obtain English prices,—if he could obtain \$3 per bushel for wheat, he could annually raise 50 bushels per acre.

Gen. Harmon, of Wheatland, thought this could not be done, and offered to pay the gentleman \$3 per bushel for all the wheat he could raise in crops of 50 bushels per acre.

Mr. Harris believed that this climate would enable him to raise such crops if a sufficiency of mineral and ammoniacal manures were supplied; but had he anticipated Gen. Harmon's proposition he would have said 40 bushels, in order to be within safe bounds. Last year Mr. Lawes of Rothamsted, England, produced 55 bushels of wheat per acre on land that had grown 12 crops of wheat in 12 successive years. This result was due in a great measure to the dryness of the season. Had the same amount of fertilizing matter been supplied in a wet year the crop would have been all straw. A dry, hot season, is what good English wheat growers desire. The nearer their summer approximates to ours in rain and temperature, the better their wheat crops.

An animated discussion followed on the value of salt as manure. JUDGE CREEVER said he applied a quart of salt to his plum trees and it killed every one of them. L. Wetherell thought salt was good for plum trees, and he had been informed that it would cure the black knot.

This was emphatically denied by many gentleman present. Salt had been repeatedly used for the black knot, and proved of no use.

Mr. Osborn of Watervliet had used salt on his orchard with the best result. It had an astonishing effect.

Mr. Harris asked how Mr. Osborn knew that the salt was beneficial—was a portion of the orchard left without any salt?

Mr. Osborn replied that the whole orchard was

dressed with salt, but that he knew the salt had a good effect because the trees grew better the year after it was applied than they did the year preceding.

James Vick of the *Genesee Farmer*, made a few humorous remarks on the subjects under discussion, alluding to the discrepancy between the statement of Solon Robinson that 200 lbs. of guano would give an increase of 13 bushels of wheat per acre, and that of Joseph Harris, that 336 lbs. were required in England to produce an increase of 10 bushels over the unguanoed portion of the field.

Mr. Harris said that if guano was found to produce as great an effect as that ascribed to it by Mr. Robinson, he quite agreed with him that it would be more profitable to buy guano than to draw manure one mile, even if it could be had for nothing. He believed, however, that, as a general rule, no such results would be obtained.

The Utmost Capacity of an Acre.

How seldom, save for the purpose of securing a premium, is the utmost capacity of an acre as to productiveness put to the test! The prevailing ambition with the majority of farmers is to go over as much ground as possible or to put in, every year, as many acres of wheat, corn, oats, and other things as they possibly can. This prevailing ambition and practice is kept up, not on the ground of any rational theory or any practical demonstration of its superiority, but mainly in virtue of the common custom, in agricultural as in other matters, of doing as other people do. So far as it claims any support or justification whatever, that claim rests, in the last result, in the position that it is easier or more profitable to skim over a good many acres than to cultivate a few in a superior manner. This, we think will turn out, when examined and reflected on, not a *fact* or a *truth*, but a baseless or false *assumption*. A few statistical facts will help to determine this question.

According to the Statistical View of the United States, or Compendium of the Seventh Census, for 1850, the average product of wheat throughout the whole of the states does not exceed twelve bushels per acre. Twelve bushels per acre is, according to the same authority, the average of the wheat crop of the states of New-York and Ohio. These estimated averages are probably rather *under* the actual products of the several states than otherwise; but the true average of either of the States specified did not probably exceed fifteen bushels per acre. Notwithstanding, then, that in the best wheat districts, and by extra-cultivation averages have been obtained of over twenty-five bushels, and individual crops of forty bushels or even more, still the evidence of the statistical returns is sufficient to prove that the average or ordinary product of wheat in these states, *where the mode of culture has been only average or ordinary*—at least not at all extra—is only at most about fifteen bushels per acre.

Now at what may the cost of the ordinary mode of putting in, harvesting, threshing and marketing a crop of wheat be estimated? After several estimates in different years, and after comparing a number of estimates by others, both published and unpublished, we have arrived at the conclusion that the cost of raising a crop of wheat may be estimated at ten dollars (\$10) per acre. In the estimates by which the above

average has been arrived at the straw has usually been taken as a set-off against the interest on the value of the land.

According to these estimates the cost of raising and getting all ready for market a bushel of wheat may be averaged at 70 cents. This is a confirmation of those rough guesses, without any accuracy of calculation, which place the expense of raising an ordinary wheat crop at 75 cents per bushel.

Now, in order to determine whether the *ordinary* mode of cultivation, or that in which *extra* pains are taken, and by which every acre is urged forward to its utmost capacity, proves the *most profitable*, all that is necessary is to take any number of certified specifications as presented to county or state Societies which have offered premiums for the best crops, and compare them with the foregoing averages. Let the cost of cultivating an acre be divided by the number of bushels raised on each acre, and the result will show the expense of raising each bushel, which will always be found *less* than the average by *ordinary* cultivation. The difference between expense and the market value, of course is profit, and the amount per each bushel being multiplied by the number of bushels, and that amount by the number of acres which each reader usually puts into wheat each year, will give him the amount of profit which he would make, each year by urging each acre to its utmost capacity of production.

Or, let him take any price as an average, say one dollar, and all the value of the crop at this rate, over the expense of cultivation, will be *net profit*. While at this price only five dollars per acre could be obtained by *ordinary* cultivation, several *premium* crops may be found on record which gave a net profit of thirty-five dollars and upwards, over all expenses. With the price of wheat above one dollar the difference in favor of high culture would be still greater.

New Fine Climber.

Ipomea limbata.—This is a new and very beautiful variety of the elegant genus *Ipomea*. The flowers are large, of a rich crimson, bordered with white, and when the plant is covered with them, it is a truly splendid object. The stem is very branching and in a short time will cover a large space. It is increased by seeds or by cuttings which strike freely. N. STONE.

Fine Fall Flower.

Anemone Japonica.—A most desirable autumnal flowering plant, beginning to bloom about the first of September, and continuing to expand its rich crimson blossoms until snow falls. The flowers increase in size and beauty as the weather grows colder until the ground freezes, when the stems die down and the roots remain deep in the ground till spring. It grows in clumps like the Peonia, and like that requires a moist, deep soil. It is easily propagated by division of the roots, the smallest piece of which planted in spring will grow to a fine plant and bloom the same season. N. STONE.

Curious Sport of the Petunia.

In a large bed of Petunias in my garden, two plants have produced, from several of their branches, a succession of twin flowers, consisting of two, three, and in one instance, five buds growing into one. The bell of each flower was split on one side and connected with the adjoining one, and all were twisted and contorted in a manner singularly wild and beautiful. The colors of these twin flowers were much brighter than on the single ones on the same plant. N. STONE.

Training Colts—Heaves—Scratches.

MESSRS. EDITORS—The horse, and all that relates to him, is interesting to most persons who like his traits or need his services. Farmers especially, receive with favor any intelligence in regard to their "willing slave," which may promise to improve his condition or remedy his defects and diseases. And it is no wonder, when we consider how constantly he depends on the strength of the animal for the means of his livelihood, as well as a great share of his pleasure. The young horse, "the limber colt," when kindly cared for, is agile and playful, ready to learn and do his lessons, if taught in a gentle manner. Scarcely ever is violence or severity necessary, and always prolongs and makes more tedious the training required to render the colt of service. Inquiries have been made through the *Cultivator*, as to the best way of "breaking" young horses. They have been answered, and judiciously. Kind and gentle usage is justly recommended. The secret charm of changing the wild and wayward colt into the safe and reliable horse, is to *assure* him he has nothing to fear, and that he shall not be hurt. Show him how much you love him, and wish to be loved by him, but at the same time that you do not fear, and will have the mastery and management of him. The most suitable time to effect this, is soon after he is weaned from the dam. If then for a few months, extra pains are taken to teach him lessons of obedience and docility, he will never forget them, and small preparation will be required, and little difficulty need be encountered to fit him for usefulness, when he arrives at the proper age for it. The details of this business are well enough understood by horsemen, and none other should attempt to "break in" the high mettled colt. Moreover the man of even temper, patient, "long-suffering, and of great kindness," will always succeed best.

As to the diseases of the horse, the writer of this knows little, and will therefore say little. But he would allude with satisfaction to your notice of heaves in the Oct. *Cultivator* for 1854. The cause, cure, and treatment of that *plaguy* malady, is there given in a nutshell. It is written, the structure of the lungs, when once broken, cannot be repaired by medicine. But the horse afflicted with heaves may be rendered nearly as serviceable as the sound one, by great moderation in all things. Violent work, especially if accompanied with gross feeding, is almost sure to aggravate the disorder. Fresh and sweet grass always alleviates it, but old or dry, and foul pasturage, has a contrary effect. The easiest way of feeding in the stable, is on clean rye or wheat straw, with a liberal allowance of oats; if wetted or washed clean in a basket, so much the better. When the *fits* come on by cold or otherwise, a few feeds of scalded bran with saltpetre dissolved in hem, are just as good as the best advertised "heaves cures." Moderate bleeding also, if the horse has been full fed, has a tendency to "suspend" the disorder.

Heaves are hereditary. Mark that, ye breeders, and keep your tainted mares from the stallion. Not only this, but spavin, ringbone, splints, curb, windgalls, crib-biting—all these and more, are far more likely to come upon horses descended from progenitors tainted with them, especially if both were so.

Scratches are caused commonly by laziness, and the horse master who suffers his animal to *catch* them, scarcely deserves to know of a cure. They may sometimes however, happen unavoidably. Gunpowder and hog's lard mixed together and rubbed in, will effect he cure, provided the feet and legs are thoroughly cleansed. Castile soap and soft blood warm water will do this, and a little Indian meal is a good addition. Try it, (the last named I mean) on your cracked and chapped hands, ye hard working ones. A SUBSCRIBER.

Fair of the American Institute.

The Annual Fair of the American Institute is this year held in the Crystal Palace, N. Y., during the whole month of October. We spent an hour very agreeably last week in examining the articles on exhibition. There was a good collection of fruits and flowers, Hovey & Co. of Boston being, perhaps, the largest exhibitors. There was considerable competition for the Best six varieties of Pears. Wm. Cranst of Hoboken, obtained the first premium. His Duchesse d'Angouleme were magnificent, and Glout Morceau, Seckel and Eastern Beurre were very fine. There was a fine display of apples. John W. Bailey of Plattsburg, N. Y. showed 87 varieties and obtained the first premium. The collection, in our opinion, was of average quality only. Here is a plate of apples of great size resembling somewhat the Gloria Mundi. One of them weighs 26 ozs. and measures 15 inches girth. The name of the variety is not given. Wm. A. Underhill of Croton Point, N. Y., exhibited very superior bunches of Isabella and Catawba grapes. R. S. Livingston of Almont, N. Y. shows a seedling pear that "ripens in November." It resembles somewhat the Seckel.

There was a good display of cut dahlias, and a large number of bouquets; but there was an almost total absence of greenhouse plants in pots. This is a great blunder. There is some fine sculpture still on exhibition, standing in straight rows, gaunt and bare. By a little effort, a good collection of green-house plants might have been obtained; and the fine statues of Flora, Venus, and good Mother Eve, in all her Paradisean innocence and beauty, judiciously placed among them, would have had a pleasing effect.

There is a good show of vegetables, especially of seedling potatoes, big pumpkins, and monstrous squashes. T. Fowler of Fishkill, N. Y., exhibits a Valparaso squash weighing 152 lbs., and a Bermuda squash, weighing 31 lbs.

There is a very meagre exhibition of grains. Paul Buchanan, of Newark, N. J., showed some "Emir Barley," a "skinless" variety, weighing 60 lbs. per bushel.

Daniel Boll, of New-York, exhibits some fair tubers of the new potato plant, *Dioscorea Japonica*, "far exceeding the potato." What is the experience of our readers with it?

Here is a jar of "superphosphate of lime," which has a very strong smell of ammonia, exceeding in this respect even Mapes' "Chilian Guano," and is probably produced in the same way—by adding a little Peruvian guano and quick lime to it. Such a smell is "desired by many farmers," but it is obtained by rendering the compound comparatively valueless. In fact, under such circumstances, there cannot be any soluble super-phosphate of lime in the mixture.

There is a goodly number of agricultural implements, but nothing worthy of special mention. Ingersoll's Portable Saw-Mill, for sawing off logs, &c., appears to be a useful machine. It is manufactured by P. C. & S. Ingersoll, Greenwich, Ct. Duncan, West & Sharp, New-York, exhibited an ingenious Upright Mangle for smoothing clothes, by putting them between rollers pressed together by springs. The price is \$30.

Some fine sugar beets, and alcohol distilled from them, were shown by A. P. Clermontel, New-York. There is a large display of machinery, but our space forbids allusion to it at this time.

Broadstuffs—Prospective Prices.

It seems to be generally anticipated by the best authorities in England, that the prices for wheat and flour will range pretty high during the coming twelve months. The crop of wheat throughout the United Kingdom, even on the most favorable computation, will be from 8 to 12 bushels per acre less than that of last year, which, at a moderate estimate, will amount to a deficiency of forty millions of bushels in the aggregate. There is also a deficiency of spring grain of all kinds, which may be made up, however, by the potato crop, which is the most abundant there has been for ten years. In France the deficiency is still greater than in England, and hence instead of having any surplus to export, the French are at this time importers of wheat, and likely to be so during the whole year. From the other countries of Europe there is no prospect of any supply, as Spain is the only country apparently likely to have any surplus, and this will be absorbed by France and the Mediterranean States.

The principal supplies for British markets must come, therefore, from this country and Canada. There was imported last year from America into Great Britain and Ireland, about 380,000 quarters of wheat, and 160,000 barrels of flour, "and supposing," says the N. B. Agriculturist, "we should get to the extent of 3,000,000 quarters in wheat and flour from that country during the next twelve months, it would not suffice to make good the supposed deficiency in our home crop this year to within 1,500,000 quarters." It is probable that we shall not be able to supply England beyond the above estimate, for our ability to export grain decreases every year by reason of the consuming population increasing every year much faster than the producing.

With these deficiencies in the wheat crop of Great Britain, and the prospects of supply less than they were last year, or the supplies, at least, not likely to rise materially above those of last year, there is good grounds to suppose that prices must advance, rather than stand as they are, or suffer any reduction.

From data similar to the above, several journals in Great Britain, have come to similar conclusions. Oas.

Improvement of Sandy Soils.

TO ARATOR.—I have read your article in the Country Gentleman of the 4th inst., upon the improvement of sandy soils, and as you ask for "light" upon the subject, I have concluded to give you mine. I shall be brief. Your land needs two things, perhaps three. They are, clay, lime and charcoal. Apply these, and send to SAML. SANDS, Esq., editor of the American Farmer, Baltimore, for Oregon peas, and drill them in rows—4 feet apart—chop out to a stand 2 feet or such a matter apart from each other, and cultivate with the plow. When they are in full leaf, lay off deep and wide furrows between the pea rows, pull up or cut them, (they are a bush not a vine,) lay them in these furrows, and cover them by running the plow on each side. Upon these furrows plant your wheat or other crop, and roll the ground hard. The clay, lime and charcoal, will make your sandy soil stiff as you may want it, and the Oregon Pea will fertilize it, especially for wheat. B. V. IVERSON. *Columbus, Ga.*

We venture to add to the above, the private note accompanying it: "If you think proper, publish the above remarks, perhaps they may advantage Arator as much as the practice has me. The Oregon pea is worth more to our country than forty Chincha Islands. They cost nothing, and while guano is evanescent, adding nothing permanently to the ground, this pea returns humus—nature's mode of restoring fertility to soils. Our reliance is grass and peas—the first to obtain manure by feeding stock, and the latter to pay back to the soil what crop robs it of."

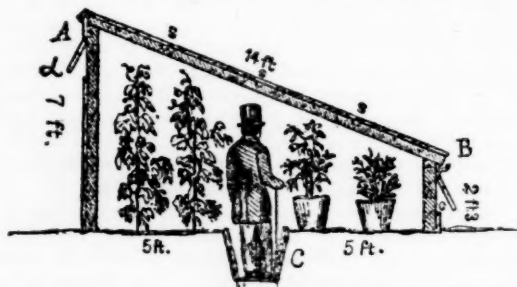
Cheap Vineries and Plant-Houses.

Some few years ago attention was drawn by Mr. Downing, through the columns of the Horticulturist, to a cheap kind of structure, first brought into notice, and very extensively used for a variety of purposes, by Mr. Rivers, of Sawbridgeworth, England. Their great feature consists in their exceeding cheapness, and hence adaptedness for commercial gardeners and amateur growers of limited means. With more or less modifications to suit circumstances, many have since been put up in various parts of this country, and among them was one in this city, built three years since by Mr. J. Mayell, and now owned by Mr. Luther. The vines in this house have this year borne an immense crop of fruit, and go far to show that however rude the structure, as fine fruit can be raised as in the most costly. This house was put up by the above gentleman altogether as an experiment, performing with his own hands the entire labor, or nearly so. Its length is 100 feet—its width about 10 feet—about as high at the back, and was completed for the incredible sum of one hundred and fifty dollars, or \$1.50 the running foot. It should be borne in mind, however, that the wood was unplanned, and therefore presenting a rather rough appearance, but which in no way alters the main feature, as the planing, rebating, &c., fit for glazing, can be performed by machinery, and hence add but little to the expense, while the wood is then in a fit state to receive a few coats of paint, and will last a good many years.

The accompanying figure and description is from the Horticulturist, and if used as a cold vinery requires some little modifications, as the raising of the back some three or four feet, to give more length of rafter, and to give a sharper angle to the roof, which is very necessary in this climate, to prevent the hot sun from burning the foliage of the vines.

The vines are to be planted on the outside of the front, and trained on wires strung across the house, about one foot from the glass. Another row to be planted to grow up the back. The border should be made inside and out, and for the one we have alluded to (on a clay bank,) was nothing but common street dirt, and for Albany or similar clays, perhaps no better material can be found, as it possesses sandy matter in abundance, which is the precise agent clays are the most destitute of, to constitute them good soils for gardening purposes. EDGAR SANDERS.

The frame of this building is wholly of wood. Posts are set into the ground about six feet apart. These posts rise seven feet above the surface at the rear, (A) and two feet three inches at the front, (B.)



They are sheathed or weather-boarded in the common way, on the outside of the posts, along the back and front—the two ends being also boarded up—with a door in each or in both ends—opposite the sunken walk, (C) This walk is sunken, partly to economise cost, and is needed to raise the back and front high enough to walk under the roof, and partly to bring the plants

as near the glass as possible—a great desideratum in all plant culture.

So far, it will be seen that this structure costs little more than a board fence. Now let us examine the glass roof, for it is here that the cost usually lies. And as this cost is not so much in the glass, as in the sliding sashes, all nicely jointed and framed, and the grooved rafters in which they are to slide, Mr. RIVERS has cut loose from the whole system of sashes, and made the entire roof one fixture. Ventilation, which is not to be dispensed with, he provides for in a much more effectual manner than the common one, by having boards, *d, e*, both at the front and rear—(either at intervals, or along the whole line, as may be needful,) hung upon hinges, so as to open outwards, and permit a stream of air to pass over through the breadth of the whole house.

To construct the roof, a strip of timber—what is usually called a wale strip—is laid along the top of the front and back parts to form a “plate.” To this plate are nailed the rafter pieces, about five or six feet apart. Across these rafter pieces, light strips, i. e. *s, s, s*, about two inches, by one inch, are let in on a level with the top of the rafter. Then, along the whole length of the roof, in the direction of the rafters, light strips are nailed to the bearers, *s, s, s*. These strips are rebated on the top like a common sash-bar, and are of course laid upon the roof just far enough apart to receive the glass—say 7 inches, (if 7 by 9 glass is to be used.) No framing of sashes is necessary, and when the whole is glazed, it is light, strong and durable, and is put together so easily, that a house 30 or 40 feet long, can be built very quickly. The strips that make the sash bars are both sawn and rebated at the saw mill; and as many of Mr. R.’s houses are built of rough stuff, left unplanned, and coated over with ship-varnish instead of paint, the construction is reduced to the minimum of simplicity and expense. The house we show a section of in the figure, is used as an early forcing house for grapes and other fruits, and the grapes are grown upright in an inside border on one side of the walk, while the other side is occupied with fruit trees—peaches, nectarines and figs, in pots laden with fruit.

Transplanting Evergreens.

EDITORS COUNTRY GENTLEMAN—My experience in transplanting evergreens from the forest, may possibly be useful to others.

Mr. Downing, in his book upon Landscape Gardening, makes the remark, that “the *only* period for the successful removal of evergreens *here*, is the spring.” That a gentleman of the nice discrimination and experience in arboriculture, of Mr. Downing, should make such a general remark, so positively, seems strange. What should we think of a naturalist, who, in describing domestic animals, should class them all together, as having manes, horns, cloven feet, wool and fur? This would all be true of the animals collectively; but would, at the same time, very much mislead the uninstructed inquirer. The horse has a mane; the cow, horns; the swine, cloven feet; the sheep, wool, and the cat, fur: but the man who should buy a cloven-footed animal for the saddle, or a furred one for her milk, would probably find he had made a mistake.

Or take the article of grain, which includes wheat, rye, maize, oats and barley. A stranger goes into a new country, perfectly unacquainted with these productions. He inquires of a friend, at what time to sow his grain; and is told to do it in September. He accordingly sows his corn, oats and barley, and having failed in the realization of his hopes, he renews his inquiries, and is informed that the *only* period for sowing grain, is the spring. He accordingly puts in his rye and wheat, and fails again. The inquirer now

gives up in despair, and takes the absolute position that you cannot raise *grain* in that country.

Having taken possession of my place in June, I could not then practice upon Mr. Downing's advice. But in October I brought 100 young trees, about equally divided between the Pines, Hemlocks and Red Cedars, and planted them in my grounds. They flourished half the winter, but in the spring *all were dead*.

In April following I replanted them, with fresh trees from the forest. The weather was favorable, and the trees were removed with a good deal of care. Out of this lot, I succeeded in saving one pine, one hemlock, and one cedar.

Not discouraged, the succeeding winter, I brought of large pines and less sized hemlocks, 16 each, and seven or eight red cedars, with large balls of earth adhering to them. Nearly all the pines are alive, and promise success. *Every hemlock died*; and nearly every cedar.

In the month of July, two years ago, I took up four cedars and transplanted them to my grounds. They are all live and flourishing beautifully. A year ago last August, I brought several more cedars, with a number of hemlocks, and planted them with less than usual care. Nearly all of them are now growing, and promise to become thrifty trees. I have also young trees and a hedge of *Arbor Vitæ*, doing well, which were transplanted from a swamp in April last.

The result of my experience, then, is, that *arbor vitæ* and balsam firs may be removed successfully in the spring, pines at mid-winter, and red cedars and hemlocks in July and August.

I have many cedars and hemlocks now growing, which appear to be thrifty and secure, which I brought from the woods on the 26th day of July last, when the sun shone brilliantly, and the thermometer stood at 96° in the shade.

I once transplanted 20 pines from the forest in June, and succeeded in saving twelve of them.

I ought to add, that it is quite possible that my hemlocks and cedars removed in the winter, might have survived, had the winter been followed by a summer ordinarily favorable. The excessive drouth, probably, aided in their destruction. The same drouth, however, did *not* kill those which I transplanted the same dry summer.

I had replanted my red cedar hedge three times, in the springs of 1852, 1853 and 1854. I suppose this summer not more than one-third of the stocks were alive.

In July, as I mentioned, I renewed the trees, and, as far as I can judge, very few have died. H. W. TAYLOR. *Canandaigua*, Oct. 15.

Management and Breeding of Sheep.

At this season of the year, sheep demand more than ordinary attention. The soil is saturated with water, the nights are cold, and the grass is so innutritious that, no matter how abundant it may be, sheep will not thrive on it. They should be placed in the fold at night, and be allowed what straw or other dry food they will eat. If possible, let them run on the highest and driest land on the farm. Wet meadows are injurious to sheep at all times, but particularly so in the fall and spring of the year.

Wool is a drug, and many—unwisely, as we think—are slaughtering their sheep. If a farmer, however, thinks it is for his interest to lessen his flock, all very well, but let him guard against the error of disposing of his *best* sheep because their carcasses happen to command a little higher price. To carefully select out the best ewes and keep them for breeding, and sell the old and poor ones, would be better economy.

The high price of good mutton is drawing the atten-

tion of farmers to those breeds of sheep which mature early, and afford mutton rather than wool. No one can question that the Leicester or South Down sheep or any of the breeds of "long" or "middle" wool sheep, will fat easier and produce more, not to say better mutton, *for the food consumed*, than the Merino or other fine woolled breeds. It is well known that highly organized matter, whether vegetable or animal, is obtained only by a great consumption of matter or force. We obtain a given amount of vegetable matter in the white turnip at a less expense to the soil than the same amount of matter in the sugar beet, mangel wurzel, or carrot because the latter is much more highly elaborated. We believe the same law holds good in the animal kingdom. In a *scientific sense*, therefore, fine mutton or fine wool cannot be produced as cheaply as coarse mutton or coarse wool. The Sussex or true South Down is probably the finest and most highly organized breed of mutton sheep, and the Cotswold the coarsest, and Mr. LAWES' experiments demonstrate that much more mutton and wool, such as it is, can be obtained for the food consumed, from the Cotswold than from the South Down. There seems to be a gradual gradation, which is quite remarkable. Sussex Downs are a finer breed than Hampshire Downs, Leicesters than Hampshire Downs and Cotswolds than Leicesters, and the experiments referred to show that more food is required to produce 100 lbs. of mutton with Sussex Downs than with Hampshires, more with Hampshire Downs than with Leicesters and more with Leicesters than with Cotswolds. The price of the mutton in Smithfield market, however, followed the same scale, and counterbalanced the seeming gain, the Sussex Down mutton commanding 3 cents per lb. more than the Cotswolds.

It is highly probable that Merinos, being a still more highly organized breed than the South Down, would require still more food for the production of mutton and wool. Their mutton and wool, therefore, must command a higher price than coarse, or they cannot be produced. This is contrary to the opinion of many writers, and we shall be glad if they will discuss the subject through our pages. We have not now space, however, to elaborate this idea.

Mutton is in demand. In a year or two fine wool will also be in demand at fair prices. Under these circumstances it will be impolitic to sacrifice the fine woolled sheep and stock the farm with the coarse woolled mutton breeds; for before you have many for sale, fine wool may be again in the ascendant. Would it not be a wiser course to carefully examine, at this time, the flocks, and select out every poor sheep for immediate disposal. All the wethers that are in thriving condition should be placed by themselves, and allowed a liberal diet. Before next February they will command a high price for the butcher. The ewes we would divide into two lots. If the flock is derived from the common stock of the country, crossed with fine woolled bucks, you will find some ewes with fine and heavy fleeces, while others are larger and coarser and possess more of the characteristics of the mutton breeds. The former should be placed by themselves, and at the proper season—say middle of December—have the best fine woolled buck at command placed with them. The others we would immediately put to a coarse woolled buck; South Down or Leicester. The lambs would come about the first of April, and if provided with dry, comfortable quarters, and nutritious food, would be worth by the middle of June in any of our large cities from three to five dollars a head.

We know many farmers who have adopted this method with much success, and our principal object in throwing out these hasty remarks is to induce them to give their experience to our readers.

Posts last a vast deal longer in wet soils than in dry, sandy loams—longer in clay than in the richest soil. In peat meadows, the bottom of the posts hold out longer than the tops and the rails.

United States Ag. Society's Fair.

The Third Annual Exhibition of the United States Agricultural Society, came off last week in Boston. On Wednesday, the rain descended in torrents, and the prospect was that the \$20,000 so nobly guaranteed by the citizens of Boston, would be required to defray expenses. On Thursday, however, the weather was favorable, the officers of the society exerted themselves, and spared no expense in carting in soil and laying down planks to render the grounds passable. They succeeded, of course. Never have we seen a finer show ground. Never a more delightful sight than the rows of stalls and pens covered with canvas, and the numerous tents of E. C. Williams. Every thing was arranged with good taste, and the most generous economy reigned throughout. Thursday and Friday were fine days, and—the success of the exhibition was greater than the most sanguine could have expected. The receipts were not far from *thirty-five thousand dollars*. Hurrah! for Boston, and the United States Agricultural Society.

Editors are *sometimes* privileged individuals. Come with us, and let us see if we can get up on to the upper portion of the judges' stand. Here we are; and obtain a bird's eye view of the whole. What a scene? Boston is situated on a peninsula, and the Fair is held on its neck. In fact, a few years ago the waves rolled over the place where we now stand. It is all *made ground*. Man commanded the waters to stand back and they obeyed. There they are at a little distance, placidly shining in the rays of an autumn sun, crossed and recrossed by the bridges of the innumerable railroads which centre in this far famed city—notions. We can just catch a glimpse in the opposite direction of two newly formed squares, or as they would be termed in other American cities, "parks." Two large and beautiful fountains constantly play, and administer pleasure to the thousands who stand to witness them. See the streams of people pouring in by thousands in all directions. Ample as are the accommodations at the entrance gates, an immense concourse is waiting impatiently to get in, and hundreds give up the attempt and return home. Inside the grounds there are probably 60,000 persons. Such a sight is seldom witnessed. The grand cavalcade of Boston Truckmen is now marching round the ring, and a fine show they make. Such a turn-out of heavy horses could be made in no other city in the country. We cannot say much for the riding. Pat on horseback finds himself in an unusual position. There is not a large show of carriage horses. That beautiful span is owned by David Leavitt, Esq., of Great Barrington, Mass., the owner of the Great Barn. This span of light, black horses, prancing along, took the first premium at Springfield two years since. They are much admired, and will doubtless take the first premium here. They are a little too light bodied and long in the legs to suit our taste. There is a race—we beg pardon, a "trial of speed"—to come off shortly, and the fact cannot be denied that it is this which draws such a crowd. We never cared to see a race, so let us go and take a look at the cattle.

Here are the Short-Horns. Messrs. Morris & Becar of New-York, exhibit 18 head. They are all "very good." We believe England itself could not turn out as large and good a show from any single herd. P. Lathrop, of South Hadley, Mass., showed his large five year old bull "Kirkleavington," and four cows. Here is a handsome bull, nearly white, and of good form, though somewhat too sprightly for a Short-Horn. He attracts much attention. He is owned by T. G. Ayer, of Passaic, N. J. L. Smith, of Wilmington, Vt., showed in this class his 5 year old bull "Ajax," weighing 2660 lbs.

Herefords were well represented. W. H. Sotham, of Owego, N. Y., being the principal exhibitor. His bull, "Defiance," was excelled by no three year old on the ground, of any class. David Goodell, of Brattleboro, Vt., also showed his splendid bull "Cronkhill." There was, also, a good Hereford cow and heifer from the State Farm at Westboro, Mass. Such animals as these cannot fail to remove some of the prejudice which exists against this excellent breed.

The show of Devons was large and very superior. The celebrated herds of E. G. Faile, L. G. Morris, and C. S. Wainright, of this state, were well represented. The cows "Kate Kearney" and "Moss Rose" of the latter gentleman, are most beautiful animals—but a little too fat. Mr. Faile's yearling bull Tecumseh, which took the first premium at Elmira, is an animal of great promise. "Winchester," a three year old bull bred by S. & L. Hurlbut of Ct., and now owned by J. N. De Forest, of Dover, N. Y., took the first premium, and attracted much attention. Wm. Buckminster of Framington, Mass., showed 16 head of very useful Devons. Our readers will recollect that this is the herd which it was claimed would make a pound of butter from four quarts of milk. They have evidently been bred with reference to their milking qualities. B. V. French of Braintree, Mass., and many others, showed excellent Devons. A cow of Mr. French's, half Devon and half "Creampot," is a perfect beauty.

There were some good Ayrshires shown, but not as many as we expected. Hungerford & Brodie of Jefferson Co., N. Y., showed six head. Their four year old bull is a fine fellow, and the five year old cow "Mary Gray" is a perfect beauty—a little too much inclined to fatten, perhaps, for an Ayrshire. R. Richardson of Medway, Massachusetts, showed a fair two year old bull, weighing 1290 lbs. R. Battell, of Norfolk, Ct., showed two useful cows. Mr. Brooks, of Princeton, and Mr. Barret of Concord, Mass., also showed fair specimens of this breed.

The show of Alderneys or Jerseys was the best we have ever witnessed in this country or in England. They were principally from the immediate neighborhood of Boston. S. Henshaw, Brookline, W. B. Bacon, Jamaica Plains, T. Motley, West Roxbury, W. A. Harris, Newton, G. H. French, Andover, Joel Barnett, Southboro, S. R. Spaulding, West Roxbury, J. French, Roxbury, John Washburn, Swampscot, and many other gentlemen exhibited very superior Alderneys. A good cow and a bull of this breed were shown from the State Farm.

For rich milk this breed has no equal. Whether they will make more butter for the food consumed than the Ayrshires or other good milking breeds, we have no satisfactory evidence. Even if they will, which we think quite probable, it would not necessarily follow that they are the best breed for general dairy purposes, for they are of no use for the butcher after they are too old to milk. For a Country Gentleman, however, who desires rich milk at any cost, they are just the breed.

The show of grades and natives was good. There was some fair working oxen; but nothing extra. If we are not mistaken there were more and better at our Albany County Fair.

The show of fat cattle was not equal to our expectations. Boston is justly noted for her good beef, and we wonder there was not more competition among those who furnish it. E. Sheldon, of Sennet, Cayuga Co., N. Y., exhibited the small, but remarkably well-fatted cattle shown by Mr. Freeman of Livingston Co., at our late State Fair at Elmira, and where they took the first premium. Mr. S. also exhibited a pair of thorough-bred Short-Horn cattle, from the herd of Brutus J. Clay, of Kentucky, which were superior to anything we have before seen in this country—we question, indeed, if they have many superior in "Baker Street." They are, however, not so fine and short-legged, as an

If sown with clover, it should be at the rate of from

a bushel to a bushel and a half of seed per acre, to from 4 to 6 quarts of clover seed. The seed should not be mixed in sowing on account of the lightness of the orchard grass seed, it weighing only 14 or 15 lbs. per bushel. It grows better than most of the grasses, and thrives well on either a clay or sandy soil or vegetable loam. It is perennial, and hence more valuable for permanent meadow or pasture. To save the seed, the tops should be cut off by a careful cradler, tied in small bundles and put in shocks, and after standing in the field eight or ten days until it is dried it should then be hauled into the barn and threshed out with flail immediately. If there be a large quantity of seed, it should then be spread on the barn floor, to prevent its heating and destroying the vitality of the seed. When placed in the mow before threshing, it is liable to heat and render the seed worthless. S. B. BUCKLEY. *West Dresden, N. Y., Oct. 14, 1855.*

Transactions of the N. Y. State Ag. Society.

The Fourteenth volume of the Transactions of the New-York State Agricultural Society is now before the public. Its 1000 ample pages afford room for much valuable matter, and also for much that is not so valuable, but which cannot well be omitted. We are happy to say that the former greatly exceeds the latter. The Report of Dr. ASA FITCH, the Entomologist of the Society, on "The Noxious, Beneficial and other Insects of the State of New-York," forms a most interesting and instructive paper of some 200 pages. The Essay on "Practical Husbandry," by the Hon. W. C. WATSON, and which received the premium of \$100, is well written, plain, and practical, and contains much useful information, while it is free from the pretensions which mark much of the agricultural literature of the day. The Essay on "Rain;—Evaporation and Filtration," by Hon. GEO. GEDDES, abounds with many interesting and instructive facts.

In the hope of drawing the attention of young men to the subject of agriculture, the Society offered a Gold Medal for an approved essay from a student of the state in any public institution. The prize was awarded to W. P. PRENTICE of this city, for an essay on "Agriculture—The Young Man in Relation to it." It is a highly creditable production, indicating considerable acquaintance with the theory and practice of agriculture, and a keen appreciation of the pleasures and advantages of rural life.

The "Discussions at the Legislative Agriculture Meetings," held in this city last winter, will be read with interest. The Reports on the management of the premium farms are of even more than usual value, embodying as they do some instructive experiments. The same may be said of the Reports on butter and cheese making, and of the reports from the various County Societies. A number of excellent wood-cuts of some of the best animals of the state, add much to the appearance of the work. On the whole, this volume evidences much thought, labor and commendable progress, alike creditable to the Secretary, the Society and the State.

We understand that Kingston has been fixed upon as the place to hold the next Provincial Fair of Canada West. Baron de Longueuil has been chosen for President. A better selection in both respects could not have been made.

Importation of Long-wooled Sheep.

Col. J. W. WARE of Berryville, Va., has recently received a new importation of Long-wooled Sheep from that well-known breeder, Mr. WM. LANE of Northleach, England. The lot consisted of six rams and ten ewes; but three of the latter died soon after their arrival, owing to suffering on the voyage which lasted sixty days. One of the rams, won the prize of £25 at the last show of the Royal Ag. Society, and we find the following notice of it in the *London Farmer's Magazine* for September:

This is an extraordinary animal; he has a very large fine top, with a well-made frame, his depth through the chest being great, his girth being 5 feet 1½ inches; his chest, bosom, and plaits all right and full; back level, broad and fat; loin and rump good and broad; hips unusually wide, and well covered; legs stand rather too near, and his chine is too high for a first-class animal; thighs fair depth, flank good; wool heavy, and full fleece, but too straight in staple; he is a splendid animal and deserves the first prize of £25.

Of the two pens of Ewes, of five each, which Mr. Lane exhibited, to one pen of which the 2d prize was awarded, and all of which were sent to Mr. Ware, the Magazine says:

Nos. 514 and 515. Mr. Lane's ewes. These pens, we think, are of much better character, and truer to each other; they match exceedingly well; they are not so high standing as lot 509 probably, but more compact, and of better quality; they prove well on examination; we characterize them thus, and we are not very careful, to select the pen; but we will take pen 515, and give our notes taken at the time—Five very nicely-matched ewes, with superior compact frames, broad back, and loins fat and firm; necks fair, and countenances good, with plenty of good wool, and stand well and high. We like 515 better than 514, which received the second prize of £10.

Warts on Horses.

EDS. CO. GENT.—Your correspondent inquires for a cure for warts on horses. In 1852, I had a horse which had a wart on one of his fore legs. I applied a ligature, and in a few days it came off, and appeared to be cured; but it soon began to grow again, and in a few months became as large as a hen's egg, and eventually a running sore. I again removed it with a ligature, and applied nitrate of silver (lunar caustic,) to the wound, at intervals of two or three days, for about three weeks, when it healed up and has given no further trouble. H. V. W. *Waterbury, Ct.*

In answer to the inquiry of Mr. SMITH, I will give my experience in curing Warts. One year ago I had a fine young mare that had no less than half a dozen warts from the size of a pea up to a half dollar. After many unsuccessful trials I applied muriatic acid (with a feather) daily and had the pleasure of seeing them disappear rapidly, and in a few weeks there was not one wart to be seen. It is a safe and speedy cure. E. S. S. *Hartford, N. Y.*

GOOD DEVONS.—We saw passing through this city last week two Devon cows and three heifer calves belonging to Mr. C. D. Bent, of Hannibalville, N. Y. They were from the celebrated herd of Mr. Hurlbut, Ct., and are superior animals. They will prove an acquisition to the already fine herd of Mr. Bent.

A Run through the Patent Office Report.

As several of the readers of this paper may not have access to the agricultural portion of the Report of the Commissioner of Patents just issued, and as it contains a considerable amount of information of general interest and utility, capable of being condensed into much briefer space, we have undertaken the task of taking a run through the Report, of condensing the more valuable items of information, and of making here and there a few remarks by way of criticism or commentary.

DISTRIBUTION OF SEEDS AND PLANTS.

In a few pages of 'Preliminary Remarks,' Mr. MASON has made some very sensible and suggestive observations on the subject of experiments with seeds. We are informed that a considerable share of the money appropriated by Congress for agricultural purposes, has been devoted to the procurement and distribution of seeds, roots and cuttings, that being the manner in which, as it seemed, the greatest amount of benefit could be realized.

Among the many expenditures of the public money of very questionable utility, we are pleased to find one appropriation devoted to the excellent object of introducing and naturalizing new and useful vegetables, hitherto unknown in the United States. By the help of this appropriation, measures have been taken to procure from every quarter of the globe such seeds, plants, roots and cuttings, as would admit of useful and successful cultivation in this country. "It is confidently hoped," says Mr. Mason, "that the number of those products which contribute to the comfort and sustenance of the human family, may, by this means, be considerably augmented." Many of the attempts made with this view, are not unlikely to prove abortive, several hundreds of new vegetable products or new species and varieties having been sent out by the Patent Office; but should only a few prove capable of successful cultivation and general utility, the trouble and expense attendant on these experiments will be richly compensated, for it is true as important, as remarked by Mr. M., that "the advantage resulting from the introduction of a new commodity of average utility for consumption or commerce, is of more value to the country than the acquisition of a new province."

The attention of the Office has also been directed to the obtaining and distributing of improved varieties of plants already known and cultivated. The idea of improving our grains, grasses, and vegetable products generally, by importations from foreign lands, cannot be deemed chimerical, thinks the Commissioner, when it is recollected how much the value of our live stock has been increased by similar means. Choice varieties of seeds, produced in particular sections of the United States, have also been procured and distributed. As an instance of the benefits which may be hoped for from such efforts to introduce seeds of improved varieties, it is stated that the number of bushels of Indian Corn produced on an acre of ground, depends, in no small degree, upon the kind of corn planted, some varieties being capable of producing fifty per cent. more than others.

The Commissioner suggests that the seeds sent out by the Patent Office should be sown in drills at liberal intervals, and well cultivated, and that the choicest heads should be selected with which to pursue a similar course the succeeding year. He seems also to favor the idea that by following such a course for a few years, a vast improvement might be made in even the very best varieties of wheat with which we are acquainted. Let the choicest heads of any grain be selected, and very special pains be taken in cultivat-

ing the produce, and let this course be pursued for a few years, and the probability amounts almost to a certainty that a new family or variety will be commenced, somewhat superior to any of its predecessors. If this improved variety were then sown broadcast, and no special pains taken with it, it would probably produce large crops of superior grain for a few years, and then relapse into an ordinary variety. On the other hand, by sowing only the best seeds and by extra cultivation, improvement might go on to a limit beyond all past or present attainments. It has been by pursuing a course similar to this, that all the improvements in live stock have been made. By like means also, have choice varieties of corn and garden vegetables been oftentimes obtained.

Management of Barn-yard Manure.

MESSRS. EDITORS—A few lines if you please on my experience with barn yard manure; and let me preface by saying I have experimented in almost all ways except, to "move the barn instead of the manure." And if Solon Robinson, or any other man, (is there another!) of the same opinion, as regards barn-yard manure, will settle down a mile from my place, I'll save him that trouble.

I was formerly in the habit of piling my manure in the yard in the spring, to rot; but found the bulk reduced about one half, besides being liable to burn, and by experiment, could not perceive that the same bulk, had a greater effect than in the green state—have put it on in this state and plowed in, and agree with you Mr. Editor, in believing that the greatest amount of "manurial elements," are obtained in this way. But owing to the season of the year, and the state of the fields to drive over, I found it much more expensive than at a more leisure time and better traveling. My manure being made in an open yard and sheds, I found it often frozen so that I could get only part, in season for corn, I was led to adopt another mode, which is to draw it out as soon as convenient after harvest, on land designed for corn the next year, putting it in small compact heaps, at such distances apart, as will be convenient to spread. I leave it until just before plowing, which is done late in the fall, then spread evenly and plow under.

I have followed this method from six to eight years, and of course think it the best. My stock are kept in the yard nights through the summer, which together with straw spread over it occasionally to absorb the liquids and make it clean, adds materially to the quality and quantity, and in my opinion overbalances the waste.

I occasionally sow about $\frac{1}{4}$ bushel plaster, over the yard, which I *guess* does good. The drainage passes off on an adjoining field, which I prefer when practicable, to a tank, as that makes labor, and is apt to be neglected, and become an unhealthy, unsightly place.

I pursue a five years system of rotation, beginning with corn on green sward, and manage by skipping some of the best spots to get round once in five years with the manure. I prefer applying it to the corn crop rather than any other, except perhaps the potato, (and that my experience has led me to think, where there is a predisposition to rot, it is an aggravation;) because in tilling the corn as it always should be, all foul seeds are destroyed,—the manure mixed with the soil—decomposed and left in good state for the following crop, at the same time yielding its full proportion of nutriment to the present. C. Amsterdam, N. Y.

The Orange Watermelon.

The experience of your correspondent from Pitts-town, concerning the Orange watermelon, is quite different from mine. About the second week in May, I planted two seeds in a spent hot-bed in a very sunny corner of the garden, only one of which came up, and that bore six melons, the largest of which weighed 15 lbs., the next largest 13½, the other four, ten lbs. each. The rind was about "half an inch" in thickness, and the flesh free from the remotest suspicion of "stringiness," and in flavor they were fit for the gods. Indeed I have "a theory" that the far-famed nectar of the gods was distilled from this fruit. I think they are three times as good as the common kinds, and allowing one for my enthusiasm, leaves them twice as good, and I can get the unanimous vote of the "folks in the house" to that.

Its resemblance to an orange is not very striking, but it is at least as great as that of a pumpkin sweet apple to a pumpkin, or a mountain sprout melon to a mountain. I raised about thirty in all, this year, and agree with a friend of mine, who said, while eating one of them, "this is the kind of melon to raise." Let me advise your correspondent and others—first, procure white seeds, as the dark seed that are sold for Orange melon are a humbug. Then if you have a place in your garden where the sun shines sixteen hours a day, (which I doubt,) make the ground thoroughly rich, and plant there. If not, plant in the sunniest spot you have, and when they begin to run, thin to two, or three at most, in the hill. When the fruit is, say four inches in diameter, set them all on end, the stem uppermost; there being space between the rind and core, they grow unshapely if this is not done.

When they are ripe, cut out each end about the size of a dollar, (we think so much of a dollar here in Connecticut that when possible we always use it to illustrate what we are saying,) bite off the adhering red, then remove the rind by cutting lengthwise about two inches in width, carefully cutting the connections; then slice crosswise, as they look much better sliced thus, and the seeds are removed more readily. Having acquired the art of dissecting properly, call in your friends, and have a melon party, take a vote as to their quality, and send the result to the Country Gentleman. EDWIN Y. BULL. *Meriden, Conn.*

Clump-Foot in Cabbage.

At the request of Mr. Julius Chapman, Simsbury, Ct., who makes inquiry for a preventive against the anbury or fingers and toes, or more properly, "clump-foot," on cabbage roots, I will give him my experience for forty years, during which time I have never known a plant the least effected by it. When you sow your cabbage bed, add half a bushel of dry unleached ashes, to 6 feet square of land, and incorporate it well with the earth; when you set them, add a table-spoon of ashes to each hole, cover them over with earth, that the tender plant may not come too readily in contact with the ashes, and be assured you will not be troubled with clump-foot cabbages; but will realise a return equal to your expectations.

Lime is of that volatile nature, that the strength is too quickly carried off to be efficacious in growing the root free from the net. P. SCARBOROUGH. *Brooklyn, Ct.*

Best Way to Preserve Eggs.

MESSRS. EDITORS—In Sept. No. of Cultivator, G. asks some questions on eggs. I cannot answer all, as one or two are difficult: but I will state my method of preserving eggs.

I take a pine barrel, (an old fish barrel well cleaned out answers very well,) and put in the eggs when they are sound, fresh and clean. I then cover them with lime water, made like common whitewash; the lime settles around the eggs, and the water stands on the top of the lime, (the eggs all under lime.) Look at the barrel once in a while, to see if four inches of water, little more or less, covers the whole. If the water is all dried up, the lime gets hard and they are difficult to take out when wanted, and you have to carry them somewhere else to wash off the lime; so always keep water on the top. This lime water must be made at least two weeks before you pour it on the eggs, or your eggs will be boiled hard enough to carry in your pocket.

When I am putting eggs away for future use, I use a pine pail to wet the lime in, and stand it by the side of the barrel in the cellar until it is cold enough; then pour on the eggs, and fill the pail again, and when it has been stirred two or three times and stood two or three weeks, do as before, and so on till I get through. Keep the vessels covered to keep out all dirt, or the eggs will look a poor dingy color. Be careful about this in the lime and water, and you will have fine white eggs.

I cannot tell how long they will keep, as I never saw any spoil. I have some that are five years and a half old as good as they ever were. I always preserve in this way, and have done so over thirty years with perfect success. I have seen people have eggs all spoiled, and have heard them say they would never put any more in lime water. They put them in lime water as soon as it was wet up and boiled them hard enough for a Frenchman's breakfast. If I transport eggs, I barrel them with oats, well shaken down and headed up. They do well for a voyage of two or three weeks, but for daily use at sea, for whaling or other long voyages, the first method is sure and perhaps the best method known. JOHN WETHERLY. *Geneva, N. Y.*

Experiment with Potatoes.

MESSRS. EDITORS—The question being often asked, which variety of potatoes is most profitable for field cultivation—on the 16th of last May I planted a field with 8 kinds, in 8 successive plats, the rows running through each plat—soil rather thin, manured alike lightly in the hill—crop moderate. On Oct. 10th, dug 12 hills of each kind, counted and weighed. The following is the result:

Peachblow—180 tubers, weight 25 lbs.—seed small, 2 tubers to each hill.

Californias—104 tubers, weight 24 lbs.—seed large, cut in 6 to 8 pieces, 2 to each hill.

Torries—138 tubers, weight 23½ lbs.—seed large, cut in 8 pieces, 2 to each hill.

Black Mercers—220 tubers, weight 20 lbs.—seed small, 2 to each hill.

English Whites—156 tubers, weight 18½ lbs.—seed small, 2 to each hill.

Merinos—100 tubers, weight 17 lbs.—seed large and cut.

Pinkeyes—116 tubers, weight 16½ lbs.—seed small, 2 to each hill.

Lilacs—125 tubers, weight 16 lbs.—seed small, 2 to each hill.

This is the result of one trial; other trials may produce different results, that is, may lead to further experiments. A. YEOMANS. *Columbia, Ct.*

A Model Farm of the Empire State.

One of the most interesting agricultural articles we have read for some time is the farm statement of G. W. COFFIN of Amenia, Dutchess Co., N. Y., to whom the New-York State Agricultural Society awarded the second premium of \$30 for good farm management. It will be found in the Transactions of 1854, just published.

MANAGEMENT OF GRASS LANDS.

The farm contains 108 acres, 90 of which are improved. The soil on about two thirds of the farm, is a limestone loam; on the other third it was what is generally called black slate. Mr. C. thinks the best mode of improving the soil is to keep it stocked down to grass, taking care in pasturing not to allow too close feeding off, and such portions as have furnished the winter stock of hay, should receive a dressing of manure as soon after the hay has been removed as convenient. August is the best time. A thick mat of grass left on the land in autumn, answers the double purpose of protecting it from the searching winds and biting frost, affording a rich bed of manure as well adapted to its growth as any that can be applied. In seeding clover land to grass, he is careful to give it a complete and thorough "breaking down," and a bountiful supply of timothy and clover seed.

EXPERIMENT WITH MANURES ON GRASS.

Mr. C. tried Peruvian guano, superphosphate of lime, plaster, and ashes, as manures for grass, with the following results:

	Lbs. hay per acre.
Without manure of any kind,.....	2000
400 lbs. of Peruvian guano,.....	4080
500 lbs. plaster,.....	2680
400 lbs. superphosphate of lime,....	3040
Unleached ashes, 26½ bushels,.....	3540

The cost of a ton of hay produced by the various manures over and above the natural yield, was, with guano, \$9.60; with superphosphate, \$19.23; with plaster \$10.83; with ashes, \$3.60.

Superphosphate of lime was used on corn, a tablespoonful to the hill. *It had no apparent effect.*

CULTURE OF INDIAN CORN.

Mr. C. has tried various methods of preparing seed corn, by soaking and rolling in different substances, but has abandoned the whole, and plants as it comes from the cob. He prefers "applying stimulants on the young plants as soon as they make their appearance." He uses plaster and ashes for this purpose—one part of the former to two of the latter, mixed, a small handful applied to two hills. He runs a steel tooth cultivator twice in a row, each way, a man following with a hoe to set up the injured corn and attend to such weeds and grass as are in and near the hill. As soon as the plants attain the height of about six inches, they are thinned out to four in a hill; another dressing of plaster and ashes is then applied, same quantity as at first, and by the time the corn is from 12 to 15 inches high, it has received its last cultivation by horse-power. We should have said that Mr. C. usually plants his corn on sod land that has lain down from 8 to 10, or even 15 years. He does not plow till the last thing before planting. This gives the corn an equal chance with weeds and grass. Plows from 4 to 6 inches deep, harrows lengthwise of the furrows, and marks with a drag, 3 feet apart each way for medium sized varieties of corn, and farther apart one way for larger.

From experiments, Mr. C. finds that the most grain is obtained by cutting up corn at the ground and stooking.

After six years' careful experiment, with a view to ascertaining the relative value of seed corn from different portions of the ear, Mr. C. is "compelled, against all former notions, to yield the palm to that from the small end. On different soils with like treatment, it has out-yielded that from other portions of the ear, in every instance where care was taken to select those ears that were well rounded over at the little end—the

increase reaching as high in some instances as at the rate of 1000 bls. (22 bushels) of ears per acre. Five times out of six, the larger ends have yielded more than the middle." Have any of our readers made similar experiments? and if so with what results?

Mr. C. sows from one to two acres of corn for fodder, which is used to good advantage when pastures become dry in August or September. He turns over green sward from first of June to tenth of July, and sows at intervals of two weeks. Makes broad furrows, 3 feet apart, and scatters from 50 to 60 grains to the foot covering by passing the harrow once across the furrows.

Four times as much cured fodder he says, can be produced in this way as is generally taken from the same amount of ground in hay.

Mr. C. tried an experiment in suckering corn. When the suckers first began to appear, they were taken off alternate rows. They soon grew out, and were cut again; the third time cutting finished the growth. The corn was husked at the usual time, 50 hills left to grow without suckering, produced 47½ lbs.; 50 hills from which the suckers had been taken off, produced 47½ lbs.

ROOT CROPS.

He raises four to five hundred bushels of carrots per acre, by turning a rich piece of greensward, and sowing in drills 18 inches apart, about the 1st of June. In this way he has little trouble with weeds. Ruta bagas, Mr. C. says, have failed for the last few years, in consequence of a rot similar to that of potatoes.

Guano was applied to oats, at the rate of 260 lbs. per acre. It advanced their ripening about six days. The same amount of superphosphate had no apparent effect.

Mr. C. plants his potatoes on corn stubble, and although not quite exempt, they are less affected by the disease than those of his neighbors. He attributes this to the absence of all rapidly fermenting substances. The potatoes, however, are small. He made an experiment on potatoes, with the following results:

10 hills without any manure, gave.....	13 lbs.
Do with handful of fresh ashes,.....	64 "
Do with handful of compost hen manure, 19½ "	
Do with handful of plaster,.....	19½ "

The manures were applied in the hill at the time of planting; the ashes proving too strong, but each of the others increased the yield at the rate of about 50 bushels per acre. We are surprised that plaster should have had as great an effect as the compost, though we have often known it to act very beneficially on light, dry soils.

IRRIGATING MEADOWS.

There is a never failing stream of hard water running through the middle of the farm, a distance of one hundred and thirty rods, and in that distance falls sixty feet. It is taken from its entrance on the farm, and conveyed in an open ditch, along the sloping grounds that descend towards the natural stream, and turned out so as to spread over about five acres of meadow. The meadows are near the barn, and are fed down in the fall and spring, until they exhibit a prospect or no great yield of hay. The water is turned on generally the first week in April, and changed, from week to week, to different places until the fore part of June; when it is allowed to spread out upon a pasture lot.

"So enormous," says Mr. C., "has the growth of grass become by the last of June, that we often cut the heaviest portions, and secure them before the month is out. Three tons per acre have been cut from the watered portions, while that adjoining, without water or irrigation, would scarcely yield a ton, though the soil and grasses were of the same nature." This is a gratifying result, and one which accords with the experience of all those who judiciously practice irrigation on grass lands. The Hon. A. B. DICKINSON states, as our readers may recollect, that *hard water*, is valueless for irrigating purposes. The above is evidence, if such were needed, to the contrary.

THE DAIRY.

Mr. C. keeps five cows. In the summer of 1852, an accurate account of their produce was kept from the

15th of April to the 15th of November. The number of lbs. of butter produced in this time, (214 days,) was 838½,

Which, at 21 cents per lb., make.....	\$176.08
5 calves sold at \$5 each,	25.00
2 quarts of milk, for family use, per day, 214 days, at 2 cents,	12.84
Allowing each cow to produce 100 lbs. of pork from skim milk, sold at \$8,	40.00
3 quarts of milk per day for family, for 60 days, at 3c.	5.40
Milk sold in 60 days, at 3 cents per quart,	36.25
50 lbs. of butter made in winter, at 23 cents,	11.75
	\$307.32

This is \$61.26 per cow. Who can beat it?

The cows during the grass season have nothing but pasture. After the frosts began to appear, they were fed pumpkins twice a day, until they had eaten 20 cart loads. Hay and corn stalks form their winter food, except an old cow, that furnished the family with milk and butter through the winter—she had four quarts of corn meal and buckwheat bran, mixed, per day.

SHEEP.

Mr. C. keeps thirty full blood South Down sheep, and twenty Cotswolds; the former sheared 3 lbs. 14 oz. of wool, and the Cotswolds 6 lbs. In 1853, sold the wool all together at 41 cents. In 1854, was offered 31½ cts. South Down wool is generally worth from 2 to 4 cents per lb. more than the Cotswolds. Mr. C. says:

"I seldom have a ewe that does not produce one lamb, certain, and sometimes three. I do not let them reproduce until two years old. South Downs are most productive, and best calculated to breed in large flocks, endure cold and storms better. I rear 45 per cent. more lambs than I have old sheep; seldom lose one; I sold one full blood South Down lamb that was 60 days old, to a butcher for \$5—no extra feed; sold eleven buck lambs for \$90. Wethers bring \$8 to \$12 per head, at two years old, for market. Long-wooled bring more than South Downs for mutton, but it costs more to fatten them." Mr. COFFIN doubtless means that the Longwools are larger than the South Downs, and bring more money on that account—not that they are worth more per pound. In London, South Down mutton is worth from 2 to 3 cents per lb. more than Cotswold mutton. Mr. C. also, we presume, would not be understood to say that it costs more to produce a lb. of Cotswold mutton than a lb. of South Down, for it is certain that such is not the case; "it costs more to fatten" Cotswolds, because they are much larger.

Since the failure of his ruta бага crop, Mr. C. allows his sheep, in their stead, a few *small potatoes* in the winter.

SUB-SOIL PLOWING.

In regard to subsoiling, Mr. C. says:

"I have used the subsoil plow on a portion of several lots of different soils, and for different kinds of grain; subsoiled one land of about sixty feet in width, green-sward, slaty on one end, and limestone soil on the other; left lands each side without subsoiling, planted to corn; all treated alike otherwise, and no perceptible difference in the yield or growth at any time; next year followed with oats; no perceptible difference in this crop. In another field, soil, limestone, loam and clay; subsoil of an adhesive character: land in corn the year before; subsoiled one land, working to the depth of eighteen inches, and sowed to oats the whole field; stuck stakes and visited the ground often, but could never see a shade of difference in the color of the growing grain, nor in the quantity produced; the stakes were all that marked the boundaries; same field sowed to wheat in the following fall, all plowed alike, showed no evidence of different treatment.

In a field on another part of the farm, less loam and more clay in the soil; used the subsoil plow to about the same depth on one land only; sowed the whole lot to oats, and could see soon after they came up, that on the sand subsoiled they looked yellow and sickly for the first

two weeks, but then began to improve, keeping on until they presented the same appearance as the rest of the lot; no one being able to perceive any difference up to the time of harvesting. On gathering, the difference was so apparent that one could have almost told with his eyes shut as soon as he came to this land. Although there was about the same growth of straw as on other portions, yet the bundles were much heavier and heads better filled. The amount produced by subsoiling must have been as much as eight bushels to the acre more than where the common plow was used only. No perceptible difference in the grass this last summer."

Boards for Draining.

MESSERS. EDITORS—Much has been said for a few years past, on the subject of thorough drainage, which is one of the most essential points of successful farming. I give you my method of drainage, which I think is equally as good in all respects, as drain tile. I take two pieces of one inch board, one of one by four and another of one by five, nail the two together, forming a V, of any length—8, 12, 14, or 16 feet, and laying them in the drain. This is equal to the horse shoe tile in calibre, and one thousand feet board measure, will lay 76 rods of drain at about one third of the cost of the horse shoe tile, including the first cost, charges for freight, &c. Every farmer almost in the state, has the means of procuring the boards at a trifling cost, as hemlock, pine, chestnut, or spruce, will saw into this kind of lumber. In case the land be of a quick sand, or soft mucky bottom, requiring the sole tile, I lay one board on the bottom of the drain, one by nine inches, which I think is much preferable, as it is laid in one quarter of the time, and is just as durable as the tile.

I have heard a great many complain that draining is too expensive, the tile costing too much; but in my way of thinking, every farmer in the state, that wishes to drain his land, has the means within himself, and those that have not can procure the lumber at a low price, say from 8 to 10 dollars per one thousand feet. I give you my views on this matter, thinking that some of your patrons may be benefited by this mode of drainage, material and mode of laying drains. WILLIAM WINSPEAR. Winspear, N. Y.

Elevating Water.

LUTHER TUCKER, Esq.—Being a constant reader of your "Cultivator," I observe in the September number (the last which came to the Island,) the first article is on the "Improvement of Grass land," in which you urge your farming readers to adopt the irrigating system, and as water is the main requisite in that system, you state, "We have enterprising farmers who raise water a considerable height by means of hydraulic rams, windmills, &c., for irrigating purposes." Will you be so kind in your November number to describe some of those machines? It is my intention to underlay a great part of my farm with cast iron pipes to irrigate it, but as water, the main requisite, will be deficient in the summer, I am on the look out for the most effective and economic machine to supply me. I have a water wheel which is worked by a sixteen feet fall, which has sufficient water in the winter to bruise gorse for my horses and cattle, but in summer when most wanted for irrigation, the run is small, but if I could send it all up to the elevation required, would be quite sufficient. I have J. J. Thomas' work on "Farm

Implements," in which there is what appears to me a good plan of an hydraulic machine, but there is no formula given for calculating the size of the different pipes to suit the supply of water and its fall, and the height it is to be raised. Will you be so kind as to give it in your next (November) number, and say if that machine sends up all the water that comes, as some hydraulic machines send up to the place wanted but a small percentage of the come-water. State the best principle of a windmill for the purpose.

Captain Harrison of the British Mail Steamer "Africa," has promised to bring me the "Illustrated Annual Register," for 1855? Will it contain any illustrations of windmills and hydraulic machines that would answer my purpose?

As the price of cast iron is high in the states, will you be so kind as to mention the substitute employed for carrying water on the level and high altitude.

Is Locust seed easily procured in New-York or Albany, and could the particular sort wanted be relied on to be sent, and its price? RICH'D NICKLIN. *Douglas, Isle of Man, 11th October, 1855.*

Our correspondent will find in the Illustrated Annual Register for 1856, a short description of *Halliday's Wind Mill*, for raising water for farm purposes, and which is undoubtedly the best yet invented. It may be ordered of Henry McCray, agent for its manufacture, South Coventry; Conn. It possesses self-regulating power, and appears on a trial of a year or two to prove quite successful. The windmill described in the work on "Farm Implements," not being a self-regulator, cannot be safely made more than four feet in diameter, and is suited to raise water only to moderate elevations.

We are unable to give a formula or table for determining the size of the different pipes to suit the supply of water for the ram; a large portion, of course, is lost at the escape-valve, and this waste becomes greater as the height to which the water is driven becomes greater than the height of the fall in the driving pipe. Our impression is that a water-ram does not succeed well unless the stream is large enough to fill a tube an inch or an inch and a fourth in diameter with a strong current. The water may be raised sixty feet or more without difficulty, with a descent of three feet.

In this country, lead pipe is invariably used for these purposes.

We think locust seed may be procured at the principal agricultural seed-stores, that may be relied on, but cannot give its price.

Injury to a Cow's Teat.

MESSES. EDITORS—I have a valuable cow that injured one of her teats in calving. Though the wound has healed, her milk is continually dropping from it. It is, besides, a great annoyance in milking, for the milk not only passes out at the proper opening, but frequently, through this hole, into the milker's face. As I have to be my own veterinarian, I propose to open the wound again with my knife, down to the milk duct, and then sew it up. Can you or any of your subscribers suggest to me a better treatment? H. *Sheffield, Mass.*

Inquiries and Answers.

"BEST WORK ON FARMING"—P. Q. W. For a single work you cannot probably do better than to purchase the "Farmer's Encyclopedia," price \$4—or if you wish a cheaper work, "Allen's American Farm Book," price \$1.

VALUE OF PUMPKINS AND TURNIPS.—I wish for light from you or some of your intelligent correspondents as to the value of pumpkins for milch cows. Some of my neighbors assert that the free use of them tends to diminish the quantity of milk and to dry up the cow, while others assert with equal confidence that they greatly increase the quantity of milk, and enrich its quality.

Also I should like information as to the relative value of the French Turnip and ruta бага per bushel, compared with corn. Suppose corn worth \$1.00 per bushel, what are turnips or bagas worth—to feed to milch cows? A SUBSCRIBER. *Concord, N. H.*

Will our correspondents give us their experience in regard to the value of pumpkins for milch cows.

It is difficult to decide what is the value of any root crop compared with corn, inasmuch as the roots have a certain value as a condiment, over and above the actual amount of nutritive matter which they contain. Common white turnips contain on an average about 8 per cent of dry substance, Skirving's purple-top Swede, a large variety common in this country and in England—about 10 per cent; and the smaller varieties of swedes or ruta bagas, 12 per cent. Their relative nutritive value would not vary much from these figures.

If anything, they underrate the value of the ruta bagas—their dry matter being probably more nutritious than the less elaborated dry matter of the common white turnip. This aside, 1 bushel of the small ruta бага is equal to $1\frac{1}{4}$ bushel of Skirving's ruta бага, and to $1\frac{1}{2}$ bushel of the common turnip; supposing the bushel to be the same weight in each case.

A bushel of corn would contain about 50 lbs. of dry matter, nearly as nutritious, in all probability, as the dry matter of the turnip. Assuming that a bushel of turnips or ruta бага weighs 50 lbs., one bushel of corn contains as much dry matter—say as much nutriment as $8\frac{1}{4}$ bushels of the small ruta бага, 10 bushels of the Skirving's ruta бага, and $12\frac{1}{2}$ bushels of the common white turnip. If, therefore, corn is worth a dollar per bushel, turnips are worth 8 cents per bushel, and ruta bagas 10 and 12 cents. It must be borne in mind, however, that we are not speaking of the value of turnips as a condiment, but as a simple article of food. We hope our correspondents will take up this subject.

HARROWING WHEAT AND TIMOTHY GRASS IN THE SPRING.—When wheat and Timothy are sown in the fall, can the ground be harrowed the following spring without injuring the grain or grass seed? O.

Harrowing wheat in the spring is on many lands decidedly beneficial, and on none, so far as we aware, does it prove injurious. We have seen wheat harrowed on very light and on clayey soil in England, with considerable benefit. Some few farmers in Western New York have harrowed their wheat in the spring for many years, and are much in favor of the practice. It is, however, by no means common.

We have never seen wheat harrowed in the spring when Timothy seed has been sown with it in the fall. Will our correspondents give us their experience on this point.

O. E. Mead, *West Plattsburgh, N. Y.*—The Stump Machine referred to is made by Mr. Willis of Orange, Mass.

MUSCLES AS MANURE.—I wish to know your opinion as to the value of muscles and salt mud as a manure. Living as I do upon the banks of Merrimack River and near its mouth I can get any quantity delivered at the landing on the river for about 50 cent

per ton I want to use it principally on onions, carrots, rees, &c. WILLIS P. SARGENT. *West Amesburg.*

We have had no experience in their use, but should deem them very cheap at the price mentioned.

AG. SCHOOL.—W. D. A., Manchester, Ct., asks—“What I wish to know is this. The location of the principal agricultural schools in the Union, and other information, which will enable me to correspond with them, and also what school, expenses and all included, you think best for a youth to attend, who desires an agricultural education.”

We regret to have to say that we know of no school, where the principles of agriculture are taught, either in theory or practice, in our whole country.

DIOSCOREA JAPONICA.—A correspondent asks whether we consider this new potato plant a “humbag.” We have no reason to regard it as such. Probably some of the accounts circulated respecting its merits are somewhat exaggerated. We usually deduct 50 per cent. from statements respecting new plants, implements, fertilizers, &c. After doing so in this case, the Dioscorea has still left many qualities which render it worth a trial. We hope those who have experimented with it will give us their experience.

A. F. R. *New Hartford, N. Y.*—We believe rye has been sown in some few instances as late as the first week in November, in the New England states, and produced a good crop. But there is too much risk about it to warrant us in recommending you to sow it so late in the season. If you do, two bushels of seed per acre will not be too much. We know of no “seed that can be sown at this time in order to facilitate work in the spring.” Winter rye should be sown in September. One and a half bushels of seed per acre is the usual quantity sown. Your other inquiries next week.

HARD-PAN.—Will you or some of your numerous scientific correspondents, inform me through your paper of the nature and quality of what we call hardpan. Much of our most valuable land, in this vicinity, is underlaid, from one and a half to two feet below the surface, with a most tenacious subsoil, much resembling very hard frozen ground. Now what we wish is, to ascertain of what it is composed, whether an excess of lime or clay, or of some one or more mineral substances; and what is the proper application to render it more friable and porous.

I have looked through most of the Agricultural papers of the day, or rather such as have fallen under my eye, but have never seen anything to meet the above inquiries; and any plain practical information in relation to the subject it is believed will be very gladly received by many of your subscribers. S. O. *Harwinton, Conn., Oct. 23d, 1855.*

BOOKS ON DOMESTIC ANIMALS.—A subscriber would like to see in the “Cultivator” a \$10 dollar list of the best books for a young farmer, particularly the names of the best treatises on live stock. A. B.

Among the best books on the management of domestic animals, we would name,

Dodd's American Cattle Doctor.....	\$1.00
Youatt on the Horse, American Edition,.....	1.50
Stewart's Stable Economy,.....	1.00
Youatt & Martin on the Hog,.....	.75
Morrell's Am. Shepherd,.....	1.00
Youatt on Sheep,.....	.75
Do on Cattle,.....	2.00

\$8.00

The remaining two dollars may be expended on a few of Saxton's twenty-five cent hand books, particularly Richardson on Hogs; on *Domestic Fowls*; and on *the Horse*; and if desired Brown's Poultry Book, or Bement's new edition of his work on poultry, now in the press, about one dollar each.

TEA WHEAT.—J. McKinney, *Sullivanville Che-mung Co., N. Y.* Tea wheat can be obtained from Emery Brothers of this city. Whether it has in all

cases “answered the expectations that were first entertained of it,” we do not know. It is, however, unquestionably a good spring wheat. We shall be glad to have the experience of those who have raised it, in regard to its comparative value with the Fife, red and white chaff, Black Sea, Siberian, and other well known varieties of spring wheat.

R. R. Chilton, *Byhalia, Miss.*—Thomas' Fruit Cultivator, Downing's Fruits and Fruit Trees of America, and Barry's Fruit Garden, are our three standard works on horticulture. We cannot say which is “best,” and which “gives the fullest information and that of the most practical character.” Thomas is considered more practical than Downing, and his work is the more recent of the three.

WHITE AND YELLOW CORN.—The opinion of most of our practical farmers is prevalent, that yellow corn is more nutritious and better generally for stock than white corn. Will you favor me with your views on the subject, and the comparative estimate of your farmers, if indeed, any have been deemed worthy to be made. ROBERT L. T. WHITE. *Hillsborough, Loudon Co., Va.*

We know of no experiments which afford satisfactory evidence on this point. Dr. SALISBURY made analyses of several varieties of corn which you will find in the Transactions of the N. Y. State Ag. Society for 1848. He says: “As a general rule, those varieties with full corneous kernels are richer in the nitrogenized bodies and oil, and less rich in starch, than the intended kinds; and of the corneous sorts with distended grains, the yellow seems to be richer than the white in oil and those bodies which contain nitrogen, and less rich in starch.” Chemists have been in the habit of estimating the nutritious value of food by the nitrogen which it contains; and they would accordingly consider yellow more nutritious than white, because it contains more nitrogen. Practical experiments, however, show that the fattening properties of food are rather in proportion to the starch, oil, sugar and other available carbonaceous compounds which it contains than to the nitrogen. According, to this, the analyses of Dr. SALISBURY do not, as has been supposed, make the yellow more nutritious than the white varieties of corn. We shall be glad of the experience of our correspondents on this point.

KEEPING ONIONS.—Will you please inform me through the Cultivator, of the best method of keeping Onions till spring. Is it important that they should not be frozen? W. H.

Our Recipe for Curing Meat.

Those who will carefully adopt our method of curing pork and beef, will be enabled to enjoy as fine hams, tongues, “dried beef,” and rounds, as the Emperor of all the Russias can command, always providing that the meat cured is of the best quality. It is this:

To one gallon of water,
Take 1½ lbs. of salt,
½ lb. of sugar,
½ oz. of saltpetre,
½ oz. of potash.

In this ratio the pickle to be increased to any quantity desired. Let these be boiled together, until all the dirt from the sugar, (which will not be a little) rises to the top and is skimmed off. Then throw it into a tub to cool, and when cold, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre.

Several of our friends have omitted the boiling of the pickle, and found it to answer equally as well. It will not, however, answer quite so well. By boiling the pickle, it is purified—for the amount of dirt which is thrown off by the operation, from the salt and sugar, would surprise any one not acquainted with the fact.—*Ger. Tel.*

Notes for the Month.

AGRICULTURAL LECTURES.—Spirited efforts are making to establish an Agricultural College at Cleveland, Ohio. An association was formed last year, professors appointed, and a course of lectures delivered during the winter. An act of incorporation has been obtained, and the Board of Trustees organized by the appointment of HARVEY RICE, Prest., and THOS. BROWN, Sec'y. It is proposed, and we think wisely, to confine the course of instruction to one annual session of three months, and to adapt it to the present actual wants of our farmers. The second annual session will commence on the first of December, and continue three months, with four lectures daily, by Professors KIRTLAND, DASCOMB, ST. JOHN, FAIRCHILD, and TOWNSEND. We hope they may find their halls crowded, and that the time is not far distant when our young farmers will place as high an estimate on the advantages offered by such a course of lectures, as do the medical and law students at the present time.

AT AMHERST COLLEGE.—Arrangements have been made for instruction on Agriculture and its kindred sciences, in connection with this institution. Beside the course on practical agriculture and on the applications of science to the same, by Prof. NASH, it will embrace courses of lectures by Professors HITCHCOCK, SNELL and CLARK, on geology, mechanical philosophy, chemistry, &c., &c. For further particulars, address Prof. J. A. NASH, Amherst, Mass.

FRUIT, &c.—We are indebted to our friend, WILSON DENNIS of Cedar Grove, Bucks Co., Pa., for a box of pears, apples, potatoes, &c., including an Osage Orange. Among the apples, were the Smokehouse, Cornell's Fancy, Sweet Winesap, Winter Redstreak, Wine Apple, Twenty Ounce, &c. In a note accompanying the box, Mr. D. says:—"The Smokehouse we consider the best apple of its season—it is a good bearer, and the tree thrifty. The Cornell Fancy, another Pennsylvania seedling, we think excellent, much the best of its season. They commence ripening about the 20th of 8th mo. (Aug.) and continue all through 9th mo. The specimen sent is quite small and over ripe. The Sweet Winesap is another excellent apple which will keep till spring. The Late Red potato which I send you, we think nearly equal to the Mercer, and it will yield nearly double on the same ground." The specimens are all of good size and handsome appearance. We are unable to give the name of the Pear sent.

SOME FRUITS, &c.—We desire to acknowledge our indebtedness to our friend R. T. UNDERHILL, M. D., for a basket containing Isabellas and Catawbas from his well-known, extensive vineyards at Croten Point; also a jar and tumbler each, of Catawba Grape and Apple Quince Jellies. The grapes, though perhaps a little too late to be in their prime, are—or were—excellent. As to the Jellies, a unanimous verdict has also been rendered in their favor—as "beautiful," exceedingly, both to the eye and to the palate. We understand that the Dr. commands a wide market for the produce of his vines and bushes, and it certainly argues something for the taste of the community that he does.


—Also to our townsman, ELISHA DORR, for some veritable Plums,—this the evening of the 29th October, by us seen, smelt, and by the more satisfactory evidence of the taste, proved to be such, all doubters to the contrary notwithstanding. They are of the *Schuyler Gage* and *Madison* varieties, and only just now plucked from the tree. They would form a delightful topping to a dish of Dessert Fruit, at least as a curiosity at this frosty time of year.

BEEF-STEAK APPLE.—We have samples of an apple known by this name, from WILLIS P. SARGENT,

Esq., of West-Amesbury, Mass. Mr. S. says the tree is a good grower and an abundant bearer, and that the fruit is esteemed "very good." They are in eating at this time, and would be called "good" any where.

WINTER POULTRY SHOW.—A meeting of the Board of Directors of the New-York State Poultry Society, was held in this city on the 10th inst., at which it was resolved to hold the next exhibition of the Society in Albany on the 13th, 14th and 15th days of Feb. next—the same days on which the annual meeting of the State Ag. Society is to be held. The list of Premiums, increased from previous years, was agreed on, which will soon be issued, and the necessary arrangements made, and a splendid exhibition is anticipated.

A NEW POTATO.—We have received from Mr. S. C. GARRETT, of South Westerlo in this county, some samples of a seedling potato of his raising. They are beautiful in appearance, and on trial proved excellent, both for boiling and baking. In fact we do not know that we have seen its superior in a long time.

 **The Black Hawk horse "Henry Clay,"** which took the second prize in the Class of Stallions for General use, at the late fair at Boston, is owned by HIRAM WILSON, of Crown Point, Essex Co., N. Y. He is a beautiful iron grey, six years old, of faultless symmetry and sprightly action, and was much admired.

THE CLOVER SEED CROP.—Although an unusually large breadth of clover land was allowed to go to seed this year, it is feared that we have harvested only a very short crop. The cool, wet weather caused a large growth of stalk and foliage, but there was not sufficient heat for the production and ripening of the seed. The *Ohio Cultivator* fears the crop has proved "almost an entire failure" in Ohio and Indiana. We saw some fine crops of clover seed in Pennsylvania a few weeks since, but in this state and throughout New-England, we fear the crop has been seriously injured by the cold, wet weather. We shall be glad to receive any information our correspondents can give us in relation to the crop in their neighborhoods. A short crop of clover seed is a national calamity, for a short crop of clover means nothing less than a short crop of wheat.

GREAT RUTA BAGAS.—Mr. Benjamin Ireland of Dexter, writing us under date of Oct. 29, says: "I raised this season seven Ruta Bagas which weigh in the aggregate 98 lbs.—the largest, 16 lbs. 8 oz., and the smallest, 10 lbs." He adds: "They were taken from a hot bed and set out on ground that was broke up last spring, on which I put very little dressing. They had no extra care, and I had no reason to expect that they would attain to such growth. Can any one beat this?"

Can any one "beat" this? Some, perhaps, can beat it, but we doubt whether any one can out-turnip it. Such a growth equals the turnips of England where they can raise almost no other cultivated field crop.—*Rural Intelligencer*.

These are large ruta bagas. We recollect selecting out 10 of the largest Skirving's Swedes (ruta bagas) from a field at Rothamsted, (Eng.) and they were found to weigh 112 lbs. The crop yielded 20½ tons of bulbs per acre, by actual admeasurement. Number of plants 20,120. Had each bulb weighed as much as the 10 selected, the crop would have been over 100 tons (gross) per acre. Will the time ever arrive when we can grow such a crop? This climate is not as good for turnip culture as England, but we can and do raise as large bulbs as our cousins over the water. But what does Brother Drew, who has been in England, mean by saying, "They can raise almost no other cultivated field crop" than turnips. Poor Albion! Horace Groely says thy sun is a big boiled turnip, and Broth-

er Drew that thou canst raise nothing but the same water root. Hard is thy fate! Well may thy Bank raise the rate of interest to 6 and 7 per cent. But be not down hearted Brother JOHN. We will try to spare you a few million bushels of wheat, and all the "yellow male" you can eat. Turnips and Indian meal would not go amiss, and would certainly be nutritious

NEW AG. JOURNALS.—We have unintentionally delayed to notice the receipt of two weekly agricultural journals which have recently been established—one at Hartford, Conn., by ANDREW STARK—*The Homestead*, with WM. CLIFT, T. S. GOLD and HENRY A. DYER, as editors—the other, *The Western Agriculturist*, at Pittsburgh, Pa., by DAVID RAMALEY, with J. S. NEGLEY as horticultural editor. They are both got up in good style—in quarto, at \$2 per year—and afford promise of essential aid to the cause of rural improvement.

ONONDAGA COUNTY.—The fall has been very wet, and much corn is not yet harvested. The yield of good corn is below the average. The yield of barley is small, and the crop in this county is very much smaller than usual. The excessive rains have given us a great quantity of fall feed, and pumpkins were never more numerous. E. M. Camillus, Nov. 2.

REAPING MACHINES.—The deferred trial of the Reaping Machines selected at the meeting of the Royal Ag. Society of England in July, took place on Wednesday the 29th of August. No pains appear to have been spared to render this trial in every respect perfect and satisfactory. This result, it is said, was finally attained; and it is probable that no reaping machines in this or any other country have ever been more severely, impartially, or satisfactorily tested, than in the late deferred trial. The awards of the Judges were as follows:—

1st Prize to Burgess & Key's Improvement of McCormick's Reaper.

2nd Prize to Palmer's Improvement of Forbush's Reaper. Hussey's Reaper, as improved by Wm. Dray & Co., of London was highly commended, but did not have any prize awarded, as only two prizes were given.

In connection with this result of the recent trial of reaping machines, it may be stated as one of the most remarkable circumstances about such trials, that during the five years in which the English Royal Ag. Society has offered premiums for the best machines, in each year a different machine has been pronounced the one superior to all others. In the first year McCormick's was classed first;—in the second year Hussey's;—in the third year Bell's, manufactured by Crosskill;—in the fourth year Hussey's, manufactured by Dray & Co.;—in the fifth, the present year, McCormick's, manufactured by Burgess & Key.

These yearly changes may probably be attributed mainly to new improvements introduced into machines which failed on previous trials; and they would seem to show that the several machines are very nearly in merit. OBS.

METEOROLOGY OF THE UNITED STATES.—We are indebted to ROBERT RUSSEL, Esq., of Kilwhiss, Scotland, for a paper read by him before the British Association at their late meeting in Glasgow, on "The Meteorology of the United States and Canada." Mr. R. had but recently returned from an extended visit to this country, and his remarks are interesting as the result of much study and personal observation. He agrees in the main with Profs. Espy, Hare, Loomis, Mitchell, and other American meteorologists. We are also indebted to Mr. R. for a paper on the "Theory of Liquid Manuring and Irrigation." We may allude to these interesting papers at a future time.

BROOM CORN.—I would be thankful for some information concerning broom corn. When should it be planted, and how? In short its management from the

time it is planted till it is ready for market. There is very little raised in this vicinity. J. O. M. Lebanon, O. [We shall be very much obliged to any one who will furnish the information asked for.]

SPROUTED WHEAT FOR SEED.—The *Indiana Farmer* copies from the *Country Gentleman* the statement made in the *Rural New-Yorker* by Wm. Garbut, Esq., of Wheatland N. Y. that he had taken some of his "worst sprouted wheat," put it into "rich soil of suitable moisture," and that "every kernel of it has grown," and remarks:

On reading the above we took a handful of badly sprouted wheat, and having separated the sprouted from the sound kernels, wetted the whole, and placed them in a situation to induce speedy germination in order to test the correctness of the statement. In two or three days the sound kernels sprouted, while every one of the others were found to have rotted, without showing the smallest signs of germination; just such a result as might have been expected. We cannot but suspect that the *New-Yorker's* correspondent must have been, somehow, mistaken in the result of his experiment. We really doubt if any such wheat as he describes ever did put out a new set of sprouts.

Have any of our readers tried similar experiments, and with what result?

Wheat Crop in England.

It is impossible to form at present any correct estimate of the yield of the wheat crop in England, for, unlike us, the farmers there seldom begin to thresh till near Christmas. It appears to be the general opinion, however, that it is below an average. It certainly is far below what it was last year, which was one of the best wheat seasons ever known in England. The yield of Mr. Lawes' experimental wheat field is, as proved by the last 12 years, a pretty correct indication of the general crop. In a private letter just received from Mr. Lawes, he says: "I have just got this year's wheat results in Broadbuck; [the name of his experimental wheat field,] the highest produce is about 35 bushels per acre, that on the unmanured plot 17 bushels per acre, [this plot has produced 12 annual crops of wheat without manure.] I consider this about an average season, and I believe my field gives a very fair idea of the crop of wheat in Great Britain."

The *Mark Lane Express* of Oct. 22, says: "We are happy to hear that in many cases farmers who have threshed the present year's crop of wheat find the yield better than expected; this, however, applies only to those farms where produce was expected to be fair. The rates in America being so well maintained, will doubtless eventually bring still more abundant supplies from the west, and the tempting prices realized through an extensive European demand may dispose farmers to part with their stocks of wheat more freely, as well as the consideration that they have a harvest of maize so far beyond their own necessities."

The same paper, in an article on the wheat crop in America, says:

The wide difference between the transatlantic corn reports of last week is deserving of notice. Thomas Peele for example, states the export of wheat and flour for the ensuing year at 24,000,000 bushels, whereas the *New-York Daily Times* allows three times that quantity, or 72,000,000 bushels supposing 3,000,000 bushels

for the increase of consumption over that of last year. Both may be extremes, but the latter we aver is nearest the mark. In 1853 the consumption for the United States is given in round numbers at 102,000,000 bushels; 1854, 105,000,000 bushels; 1855, 108,000,000 bushels; and the produce in 1856 being "185,000,000 bushels," not a very high increase of produce per acre when we look at the greater breadth sown, being much under our own increase of last year, and consumption 111,000,000 bushels, there would remain for export 74,000,000 bushels, or 9,250,000 qrs., supposing no more than the usual quantity of Indian-corn meal consumed. But, as the above journal justly observes, oats and Indian corn, especially the latter, being an over abundant crop, much more oat and Indian-corn meal will be used at home, many of our relatives proposing to use nothing else, sending their whole crop to market, while last year they lived almost exclusively on wheat flour, so that from 10,000,000 to 12,000,000 qrs. may be spared for Europe. Add to this the fact that any quantity of Indian corn can be spared almost, and that Indian meal is now largely used in many parts of the continent of Europe, we see no reason to despair of even over-flowing plenty—a state of things which cannot be too widely known.

We feel quite certain that the above estimate of the quantity of wheat we can export to Europe is *far too high*; even if all the relatives of our friend of the *Times* should "use nothing else" than oat and corn-meal. It is evident that the English are looking to us for breadstuffs, and we fear they will be disappointed if they expect an "overflowing plenty."

MARSHALL justly observes, "Agriculture is a subject, which, viewed in all its branches and to their fullest extent, is not only the most important and the most difficult in rural economics, but in the circle of human arts and sciences."

P. D. GATES,

COMMISSION MERCHANT, and dealer in *Agricultural Implements and Machinery*, No. 12 BROADWAY, NEW-YORK.

Ketchum's Mowing Machines, Hay Presses, Horse Hoes, Cultivators, Plows, Straw Cutters, Corn Shellers, Reapers, Horse Powers and Threshers, Combined Thresher, and Winnowers, and other Agricultural Machines.

May 24—m12t*

NURSERY STOCK

Of **FRUIT TREES** and **EVERGREENS**,

To be sold by **W. THORBURN, J. V. B. TELLER, and**
Estate of **JAMES WILSON** deceased :

WHO now offer for sale, in lots to suit purchasers, the entire NURSERY STOCK belonging to the firm. *Great reductions* from the regular prices will be made, as we desire to make as large sales as possible this autumn and next spring, to dealers and others, in order to *settle up entirely the business of the firm*. The stock is as follows :

- 31,000 Grafted Apple, 5 to 12 feet high, with fine heads.
- 14,000 Standard Pear, with fine heads, 4 to 10 feet high.
- 4,000 Plum, 4 to 10 feet high.
- 1,600 Cherry, 5 to 12 feet high, with fine heads.
- 2,000 Peach, 1 and 2 years from the bud.
- 3,000 European Lindens, 2 and 3 years, very fine trees, with fine heads.
- 3,000 European Mountain Ash, 1 to 3 years.
- 5,000 Norway Spruce.
- 1,000 European Larch, 100 Tulip Tree.
- 150 Laburnum and Balsam Fir.

Also, Pear, Apple, Plum and Cherry Stocks. The Fruit trees embrace all the very best varieties for extensive cultivation, and are of fine, healthy growth.

Personal inspection of the trees at the Nursery, preferred to correspondence. A liberal discount for cash, as it is desirable to sell for cash, instead of on credit. Catalogues to be had on application, or by mail, directed to

W. THORBURN, Seedsman, &c.,
Sept. 13—w7tm5t 492 Broadway, Albany.



Isabella and Catawba Grape Vines.

OF PROPER age for forming Vineyards, cultivated from and containing all the good qualities which the most improved cultivation for over fifteen years has conferred on the Croton Point Vineyards, are offered to the public. Those who may purchase will receive such instructions for four years, as will enable them to cultivate the Grape with entire success, provided their locality is not too far north. All communications addressed to R. T. UNDERHILL, M. D., New-York, or Croton Point, Westchester County, N. Y., will receive attention. The additional experience of three past seasons, gives him full assurance that by improved cultivation, pruning, &c., a crop of good fruit can be obtained every year, in most of the Northern, all the Middle, Western and Southern States.

Also, Apple and Quince Trees for sale as above.

N. B.—To those who take sufficient to plant six acres, as he directs, he will, when they commence bearing, furnish the owner with one of his Vinedressers, whom he has instructed in his mode of cultivation, and he will do all the labor of the vineyard, and insure the most perfect success. The only charge, a reasonable compensation for the labor.

Nov. 8—w4tm2t

R. T. U.

THE DOLLAR NEWSPAPER,

PHILADELPHIA,

Is believed to be the cheapest and best family paper in the United States, and aims to interest and instruct every member of the family circle.

PRICE TO SINGLE SUBSCRIBERS \$1 PER YEAR.

THE "Newspaper" contains as much reading as the large two dollar papers, and weekly more original matter than any other paper of like character. It has unequalled facilities for THE EARLY PUBLICATION OF NEWS. With monster machines, capable of printing each 20,000 copies per hour, its columns can be held open for news, each week, to within a few hours of the date of publication. It is thus enabled to publish the latest and most reliable market reports, and to give all important news to the latest moment.

THE FARM AND THE FARMER.

The Agricultural Department of the "Newspaper," is spiritedly maintained by contributions from practical farmers, and by thousands of readers this department is considered one of the most important features of the paper. Theoretical and practical agriculture, thus blended and compressed weekly into a short space, it is hoped will not fail to interest and profit its readers.

Three Original Novelettes.

For the cultivation of a correct taste in literature the publishers have not hesitated to incur the expense of the best story writers in the country, and have formed engagements for three Original Novelettes, from P. HAMILTON MYERS, EMERSON BENNETT, and CHARLES J. PETERSON, Esq., all gentlemen well known to literary fame. These novelettes are to be furnished with the least possible delay. The publication of the first will be commenced in the course of a few weeks, and will be followed immediately by the others. All these stories will be copy-righted and published in book-form—a proof of their superior character.

The publishers have renewed their offer of a year's gratuitous subscription to each subscriber of that Post-Town, that shall send in the greatest number of subscribers within a year from the first day of June last.

The following are its **TERMS PER YEAR** :

One copy, one year,	\$1
Six copies, one year,	5
Thirteen copies, one year,	10
Twenty, and one to the getter up of the club,	15
Twenty-seven, do do do	20
Thirty-four, do do do	25
Forty-two, do do do	30
Fifty, do do do	35
Seventy-five, do do do	50

To secure the advantages offered to Clubs, the amount of payment for each Club must be remitted at the same time.

Address, post-paid, to **A. H. SIMMONS & CO.,**
S. W. corner Third and Chestnut sts., Philadelphia.

Nov. 1—w2tm1t.

HAY PRESSES.

HAY PRESS, to press bales of 150 lbs. to 225 lbs.—Price \$40. Hay Press to press bales of 200 lbs. to 250 lbs.—Price \$75.

The above presses are well worthy the attention of farmers. For sale at the North River Agricultural Warehouse.

GRIFING & BRO.,
Sept. 27—w&m3m 60 Cortlandt-St., New-York.

SHEEP BOOK.

THE Breeds, Management, Structure and Diseases of the Sheep, with Illustrative Engravings and an Appendix. By Henry J. Canfield of Ohio—for sale at the office of this paper—price \$1.00.

FOR SALE,

A FEW pair fancy Lop-Eared Rabbits at moderate prices, very fine specimens, delivered at Hudson.

Also a few pair Dorking Fowls, from the fine stock of R. H. Van Rensselaer, ready for delivery in September. Address

S. V. C. VAN RENSSELAER,
Claverack,
July 26—w&mtf. Col. Co., N. Y.

PURE BRED STOCK

FOR SALE—Thorough Bred Durham Cattle, Pure Bred Spanish Sheep, French Sheep, and Suffolk Pigs. Apply to J. S. GOE, Tippecanoe, 4½ miles east of Brownsville, Fayette Co., Pa. March 1—wly*

Devon Cows,

HEIFERS, and Bull Calves—pure blood—for sale by Feb. 1—mly. B. V. FRENCH, Braintree, Mass.

THOMAS GOULD,

BREEDER OF

Durham Cattle, Suffolk Swine,
Madagascar or Lop-Eared Rabbits, English Ferrets,
GUINEA PIGS,
Dorking and Brahma Fowls,
AURORA, CAYUGA COUNTY, N. Y.

Suffolk Pigs,

OF pure blood, for sale by Feb. 1—mly B. V. FRENCH,
Braintree, Mass.

ENGLISH CATTLE,

Imported on commission by Messrs. THOS. BETTS BROS.,
Bishop's Stratford, Herts, England—51 Maiden Lane,
New-York City.

BEING much the cheapest and the only way of obtaining Stock direct from the Breeder, which will give gentlemen an opportunity of obtaining the best stock, without having to pay an exorbitant price for them in America. The firm having had forty years' experience, they feel confident of giving satisfaction both as regards price and selecting the stock from the best herds in England.

Thorough-bred Horses,	Hampshire Sheep,
Short-Horned Cattle,	Cotswold, Leicester do
Devons, Herefords, Ayrshires,	Suffolk Pigs,
Alderney Cows from Islands	Essex, Berkshire do
of Alderney and Guernsey,	Merino Sheep from Spain,
Pure bred Southdown Sheep,	Mules, do do

Messrs. Betts Bros. have appointed one of the most experienced men in England entirely for purchasing Thorough Bred Horses. They have also an agent in Spain for purchasing mules, Merino Sheep, etc. Messrs. Betts Bros. have purchased a valuable patent invention which will prevent accidents occurring to cattle across the Atlantic. They can now be safely imported any time during the year. The cattle will be insured from Liverpool to New-York when desired, by charging a small per centage.

A steamer will leave Liverpool with cattle about the first of every month. The stock will be delivered at New York about six weeks from the time the order is given in America.

Circulars containing all particulars, expenses to America, and the prices of Cattle in England, may be had by applying by post to Messrs. THOS. BETTS,

or, J. M. MILLER, Agent, 51 Maiden-lane.

Jan. 4—1am—mly. New York City.

FARM FOR SALE.

A FARM of One Hundred acres in MILO CENTER, Yates Co., N. Y. a short distance from the line of the Canandaigua and Elmira Rail Road. It is well watered by springs and a fine stream, easily cultivated—soil a fine gravelly loam, unsurpassed for either grain or grass, with exception of about 20 acres which is choice natural meadow land.

It has upon it a good Dwelling House and out Buildings—is in a good neighborhood, convenient to churches, school houses and stores, and is in every respect one of the most desirable locations in the state. For terms which will be made easy, apply to GASPER & Co., 41 Water St., New-York; Caleb Gasper, Esq., Marcellus, Onondaga Co.; Geo Young, Esq., Milo Center, Elias Bently, Esq., Sandy Creek, Oswego Co.; S. Booth, Esq., Branchport, Yates Co. Norman Seymour, Mechanicsville, Saratoga Co., N. Y., Judge Ellsworth, Pen-Yan.

March 1—mtf—

Virginia Land for Sale.

THE subscriber having yet a few Farms for sale from his large and valuable tract of land situated in the county of Fairfax, Virginia, on and near the Turnpike leading from Washington and Georgetown to Leesburgh, 16 miles from the city of Washington, two miles from the Canal, and within 3 miles of the Alexandria, Loudon and Hampshire Rail Road. The soil is of the first quality, of a deep red color, seldom affected by drouths to which most lands are subject. Adapted to grain, plaster, clover, and all kinds of grass. The land will be sold in lots of 100 or 200 acres, or as the purchaser may desire. Every Farm will be well supplied with wood, which consists of oak, chestnut and second growth of pines. Persons wishing to purchase would do well to call and examine before purchasing elsewhere. For further particulars, inquire of the subscriber on the premises.

S. S. MILLER,
Aug. 1—m5t Spring-Vale, Fairfax Co., Va.

PERUVIAN GUANO.

PERUVIAN GUANO, No. 1, with Government weight and brand upon each bag. Price \$52 per ton of 2000 lbs. **PERUVIAN GUANO**, No. 1, taken from the lower part of the cargo, a little damp, with above brand upon each bag. Price \$43 per ton of 2000 lbs.

As the latter article is sold by some retail dealers for the best quality, be particular to observe that the Damp Guano has the figure 2 under the weight mark. For sale by

ANTOINE LONGETT,
34 Cliff street, corner of Fulton,
Oct. 11—mtf New-York.

DE BURG'S NO. 1

Ammoniated Super-Phosphate of Lime.

THE above valuable compound is warranted pure and genuine. The manufacturing department is under the personal direction of the subscriber, and will have studious attention as to his preparation at all times being uniform in its component parts. Many experiments during the past year, with the above brand, in equal quantity with Peruvian Guano and other concentrated Fertilizers, scrupulously testing its value as compared with the latter, by various State Farms, public Agricultural Committees, &c., have been made, showing a preference for it as a manure, both as to early inducement and prolificness of growth. Pamphlets will be sent on application to the subscriber, containing full directions for use, &c.

C. B. DE BURG,
Sole Proprietor and Manufacturer,
June 14—w&mtf. Williamsburg, L. I.

Maclura or Osage Orange Hedges.

H. W. PITKIN,

Manchester, Conn., Dealer in Seeds and Plants.

IN consequence of the increasing demand for this remarkable Hedge plant, my exclusive attention is now given to the business. Seed is yearly gathered by my own agents, and may be relied upon as fresh and genuine. As many persons prefer the plants ready for setting in hedges, I have established nurseries in different sections of the country, where they are raised on an extensive scale, and in the most economical manner, and am ready to contract them in any quantity. A descriptive pamphlet on the Culture of Osage Orange Hedges, given to purchasers.

G. G. SHEPPARD, New-York—P. B. MINGLE, Philadelphia
—BYRAM, PITKIN & Co., Louisville, Ky., wholesale Agents.
Apply as above. April 5—w&mly

THE SATURDAY EVENING POST.

ESTABLISHED AUGUST 4, 1821.

Weekly Edition between 80,000 and 90,000.

IN ISSUING their Prospectus for 1856, the proprietors of the Post take it for granted, that the public are already tolerably well acquainted with the character of a paper that has grown strong during the storms and sunshine of THIRTY-FOUR YEARS. Their object always has been, as it remains to be, to publish a weekly paper for the family circle, which shall not only amuse, but also instruct and improve, those who may read it. To accomplish this object, the best articles are selected or condensed from foreign and domestic periodicals, and original articles of an instructive character procured, when possible.

Letters from Foreign Lands; the most interesting portions of the Weekly News of the World; Sketches of Life, Adventure and Character; Selected and Original Articles upon Agriculture; Account of the Product and Stock Markets; and a Bank Note List are included among the solid information to be constantly found in the Post.

But the mind requires a wider range—it has faculties which delight in the humorous and lively, the imaginative and poetical. These faculties also must have their appropriate food, else they become enfeebled, and, as a consequence the intellect becomes narrow and one-sided, and is not able to take an enlarged and generous view of human nature and its destiny. To satisfy these heaven-implanted cravings of our mental being, we devote a fair proportion of the Post to FICTION, POETRY and HUMOR.

Among our contributors to the first two of the above Departments, are several of the most gifted writers in the land. We also draw freely for Fiction and Poetry upon the best periodicals in this country and Great Britain. We design commencing a New Story by MRS. SOUTHWORTH, author of "The Deserted Wife," "Miriam," &c., in our first paper of January next.

ENGRAVINGS, illustrative of important places and actions, of Agricultural and other new Inventions, with others of a Humorous, though refined character, are also freely given.

The Postage on the Post to any part of the United States, paid quarterly or yearly in advance, at the office where it is received, is 26 cents a year.

TERMS—CASH IN ADVANCE.

Single copy,.....	\$2.00 a year.	13 copies, (And 1 to getter-up of Club,)	\$15.00 a year
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8 " (And one to getter-up of Club,).....	10.00 "		

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DEACON & PETERSON,

No. 66 South Third Street, Philadelphia.

☞ **SAMPLE NUMBERS** sent gratis to any one, when requested.

☞ We annex a few Notices of the Post from its Exchanges:—

This is one of the few large papers filled with life and and thought, instead of lumbering trash. Its management is marked by liberality, courtesy, ability, and tact. It employs the best literary talent, and spares no pains or expense. As a family paper, one of literary and general intelligence, we cordially commend it.—*Cayuga Chief, Auburn, N. Y.*

In another column is an advertisement of the Saturday Evening Post. Our readers may rely upon it, that Deacon and Peterson will be as good as their word. So far as we can judge by years of observation, these publishers do rather more than they promise; and their paper is edited with very marked ability. It is singularly free from silly sentimentalism and bluster, but is of a healthy tone on all subjects, always moderate in language, but always mildly advocating the right. We find it one of the most generally attractive papers in our exchange.—*Saturday Visitor, Pittsburgh, Pa.*

We have heretofore spoken in high terms of the merits of the Post, as one of the best papers on our exchange list, and we regard it as one of the best literary papers to be found anywhere. Its editorials are written with ability, and take a liberal, independent, and comprehensive view of men and things.—*Star and Adv., Wrightsville, Pa.*

It is a paper of the largest size, and is edited with ability. It is highly spoken of by its readers, some of whom have clung to it for the last quarter of a century. It is too well and favorably known to need lengthy commendation. It tells its own story each week, and if you send for it once, you will be very sure to do so again.—*Valley Times, Cedar Rapids, Iowa.*

It is deservedly one of the most popular public journals in the United States, combining as it does, in a literary point of view, all the interest of the best magazines, with a vast amount of general intelligence.—*Republican, Litchfield, Ct.*

☞ **TO EDITORS.**—Editors who give the above one insertion, or condense the material portions of it, (including our terms,) for their editorial columns, shall be entitled to an exchange, by sending us a marked copy of the paper containing advertisement or notice.

Dec. 1—w22,24m2t.

It is emphatically one of the very best literary newspapers in the whole country and deserves the unparalleled success with which it has met under its present enlightened and liberal proprietorship. The greater its circulation in this state, the less, probably, is our gain pecuniarily; yet we must pronounce it a most excellent journal, and worthy of the patronage of everybody. The contributors to the Post are among the finest writers in America, and the editor's articles are always characterized by truth and taste.—*Jersey Blue, Camden, N. J.*

We regard it as the best of the Philadelphia literary papers. Its editorials are written with ability, and take a comprehensive view of whatever is discussed.—*Echo, Johnstown, Pa.*

The long period during which this sterling paper has been established, and its recent immense circulation, (being between 80,000 and 90,000,) are ample guarantees to all who desire an excellent paper, that they will get the worth of their money by subscribing for the Post.—*Clarion, Lockhart, Texas.*

This is one of the best family papers upon our exchange list. Its original and well selected matter is of the first order.—*North-Western Democrat, Minneapolis, Min. Ter.*

The editorial department is conducted with ability and skill, and the news department, for a weekly paper, is exceedingly full and complete. All things considered, the Post is not excelled, for family reading, by any paper that we know of.—*Gazette, Fulton, N. Y.*

This is one of the oldest weekly papers in Philadelphia. It has lived on through all weathers—adversity has tossed it, and prosperity filled its sails—and yet it is the same staunch, strong barque.—*Spectator, Oquawka, Ill.*

We are in weekly receipt of this invaluable family journal, and should feel very much at a loss without it, as we consider it the best literary paper now published in the United States without any exceptions.—*Democrat, Cambridge, Md.*

SHORT HORN BULLS.

THE subscriber offers for sale at moderate prices, the following named Short-Horn Bulls. They are all superior animals; for their pedigrees reference may be had to the Second Volume of the American Herd Book:

DEFIANCE—Red with white marks—calved May 8th, 1854.

BARRISTER—Red with white marks—calved May 3d, 1854.

LENQX—Roan and white—calved May 4th, 1854.

WILLIAM KELLY,

Ellerslie, near Rhinebeck, Dutchess County, N. Y.
Nov. 22—w4tm2t.

SHORT HORNS.

THE subscribers offer for sale a few Bull and Heifer Calves, the get of "Astoria," "Lord Vane Tempest 2d," "3rd Duke of Cambridge," imported, and imported "Earl Vane."

Catalogues, with pedigrees of the animals, will be furnished upon application to J. C. JACKSON, Esq., 111 Water street, New-York, or at the farm of the subscribers at Elizabeth, New-Jersey.

B. & C. S. HAINES.

Dec. 1—m3t

GARRETT'S SEEDLING.

THE subscriber now for the first time offers for sale a few barrels of this new and superior Potato. It is a seedling of his own raising, is very productive, and not liable to rot. He presents it to the public with confidence that it will be found in all respects a valuable acquisition, and refers all interested in the subject to an editorial notice in the COUNTRY GENTLEMAN for Nov. 15, page 316.

Price, delivered in Albany at the Railroad or Steamboat Landing, \$9 per barrel. Address S. C. GARRETT,
Nov. 22—w4tm3t* South Westerlo, Albany Co., N. Y.

ATTENTION FARMERS.

THE subscriber is agent for the sale of FELTON'S PATENT PORTABLE MILL FOR GRINDING CORN, Corn and Cob, Oats, Peas, or any other substance for feed. This machine has been subjected to very severe tests in public, and has given universal satisfaction in every trial. It was awarded the first premium at the Fair of the American Institute now being held at the Crystal Palace in New-York City. It is the most simply constructed mill in use, and is capable of grinding six or eight bushels of corn and cob in an hour with a one horse power, with perfect ease. It is equal in every respect to a Burr stone mill—is just as durable, and a self-sharpener. It occupies a space of only 2½ feet square, and can be gauged to grind coarse or fine at pleasure. Price \$60 and \$65 for Mills for Horse Power, and \$125 for Mills for Steam Power.

The subscriber is sole manufacturer of the celebrated EXCELSIOR HORSE-POWERS, THRESHERS, SEPARATORS, and EXCELSIOR CIDER-MILLS, Krauser's Patent, and has on hand constantly a complete assortment of AGRICULTURAL IMPLEMENTS and SEEDS of the most approved kinds.

RICHARD H. PEASE,

Excelsior Agricultural Warehouse and Seed Store,
Old Stand, 369 and 371 Broadway, Albany, N. Y.
Nov. 15—w4tm1t.

Raspberry and Strawberry Plants,
Grape-Vines and Rhubarb,

AT VERY low prices, particularly to nurserymen and for field planting:

30,000 Hudson River Antwerp.

20,000 Fastolf.

10,000 Franconia.

10,000 Rivers' New Large Monthly.

10,000 Kneveit's Giant.

And a general assortment, including all the valuable varieties, especially Brinkle's Orange, the most beautiful and best of all raspberries.

GRAPES—Isabella, Catawba, Diana, Herbemont's, Clinton, Elsingburg and Bunkle.

CURRENTS—A general assortment, including Large Black English, Black Naples, Myatt's Victoria, and Large Red and White Dutch.

RHUBARB—Victoria, Downing's Colossal, Linnæus, Cañon, and a great variety of seedlings.

STRAWBERRIES—Hovey's Seedling, Boston Pine, Early Scarlet, and McAvoy's Superior.

WILLOW CUTTINGS.

C. W. GRANT.

Oct. 11—w&mtf

Newburgh, Orange Co., N. Y.

RURAL PUBLICATIONS.

THE COUNTRY GENTLEMAN—A Quarto

Weekly Journal of 16 pages, embracing every subject of practical interest to the Farmer and Country Resident, either in the Field or at the Fireside. New volumes commence 1st of January and July in each year. Price, \$2 a year. Send for a Specimen copy.

We believe that we possess unequalled facilities for making THE COUNTRY GENTLEMAN, either as an AGRICULTURAL, HORTICULTURAL, or FAMILY JOURNAL, DECIDEDLY THE BEST PAPER IN THE COUNTRY. The labor and expense bestowed upon it are unexcelled, while its list of Practical and Scientific Contributors, both at home and abroad, is certainly unequalled by any similar Periodical.

THE CULTIVATOR—A Large Monthly

Journal of 32 pages, exclusively devoted to Practical Agriculture and Horticulture, and now about to commence its TWENTY-THIRD YEAR. Price, Fifty Cents.

THE CULTIVATOR has been too long known in every part of the country, as TAKING THE LEAD OF ALL ITS COTEMPORARIES, to render it necessary for us to do more than call attention to its EXTRAORDINARY CHEAPNESS, and to the fact that we propose to give this year as last, to Every Subscriber in clubs of Twenty or more, a copy of the ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS, (containing 144 pages, duodecimo, and over 150 engravings,) as a NEW YEAR'S PRESENT. We offer also a list of upwards of \$300 in premiums to those engaged in procuring subscribers for our publications. Send for a Specimen copy.

THE ILLUSTRATED ANNUAL REGISTER OF

RURAL AFFAIRS—Being a condensed Encyclopedia of Rural Matters, issued in Yearly numbers, copiously illustrated, and got up in the best style. Price 25 cents—Bound, Fifty Cents—Sent by mail postpaid.

The first number of this work for 1855, has now been a year before the public, and has been received with the approbation which its Cheapness, Usefulness and Beauty, so richly deserve. No. 2 has just made its appearance; and while its contents are wholly different from those of the previous issue, we are confident that either alone, or the two together, present far more of valuable information on the numerous subjects of which they treat, than has ever before been comprised within so small a compass, embellished with such variety of illustration, and offered at so trifling a cost.

RELATIONS OF CHEMISTRY TO AGRICULTURE,

and the Agricultural Experiments of Mr. J. B. Lawes. By JUSTUS VON LIEBIG. Translated by S. W. JOHNSON. Price Twenty-Five Cents.

This is the last work of the distinguished chemist, and is a Review of recent investigations in England and elsewhere, into the Relations of Chemistry to Agriculture, and the correct principles to be followed in the Application of Manures.

The attention of all persons interested in Rural Pursuits is invited to the above works. All communications, subscriptions and orders, should be addressed to

LUTHER TUCKER & SON,

November, 1855.

Albany, N. Y.

ICHABOE GUANO.

JUST RECEIVED by the brig Wave Spirit, direct from the Ichaboe Islands, a cargo of this superior Guano, (which is the first cargo arrived, since that brought by the ship Shakspeare in 1845.) This guano is now landed in excellent order, will be sold in lots to suit purchasers. Samples and analysis will be sent by addressing the Agent. As the quantity is small, early application will be necessary. Farmers who cannot remove what they desire, may have it remain on storage until April 1st, at 12½ cts. per ton per month which includes Insurance.

Price \$40 per ton of 2000 lbs.

A. LONGETT, Agent,
34 Cliff St., Corner of Fulton,
New-York.

Nov. 1—w&mtf.

